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WORLD DEBT AND THE MONETARY ORDER

Robert E. Weintraub	International Debt: Crisis and Challenge
Allan H. Meltzer	The International Debt Problem
James B. Burnham	World Debt and Monetary Order: Learning from the Past
Michael Mussa	U.S. Macroeconomic Policy and Third World Debt *Comment by* **Karl Brunner**
A. James Meigs	Regulatory Aspects of the World Debt Problem *Comment by* **H. Robert Heller**
Jerry L. Jordan	Restoring Credibility to International Lending *Comment by* **William R. Cline**
Paul De Grauwe and Michele Fratianni	The Political Economy of International Lending *Comments by* **Larry A. Sjaastad** and **Rimmer de Vries**
Gerald P. O'Driscoll, Jr. and Eugenie D. Short	Safety-Net Mechanisms: The Case of International Lending *Comment by* **Anna J. Schwartz**
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Manuel F. Ayau	The Impoverishing Effects of Foreign Aid *Comments by* **Sven Arndt** and **J. Richard Zecher**
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CATO JOURNAL VOLUME 4 NUMBER 1 SPRING/SUMMER 1984

WORLD DEBT AND THE MONETARY ORDER

Introduction 1

David I. Meiselman
In Memory of Robert E. Weintraub 13

Robert E. Weintraub
International Debt: Crisis and Challenge 21

Allan H. Meltzer
The International Debt Problem 63

James B. Burnham
World Debt and Monetary Order:
Learning from the Past 71

Michael Mussa
U.S. Macroeconomic Policy and Third World Debt 81

Comment by **Karl Brunner** 97

A. James Meigs
Regulatory Aspects of the World Debt Problem 105

Comment by **H. Robert Heller** 125

Jerry L. Jordan
Restoring Credibility to International Lending 131

Comment by **William R. Cline** 141

Paul De Grauwe and Michele Fratianni
The Political Economy of International Lending 147

Comments by **Larry A. Sjaastad** 171
Rimmer de Vries 177

Gerald P. O'Driscoll, Jr. and Eugenie D. Short
Safety-Net Mechanisms: The Case of International Lending 185

Comment by **Anna J. Schwartz** 205

Fred L. Smith, Jr.
The Politics of IMF Lending 211

Comment by **Robert Solomon** 243

Roland Vaubel
International Debt, Bank Failures, and the Money Supply: The Thirties and the Eighties 249

Comment by **Lawrence H. White** 269

Thomas H. Humphrey and Robert E. Keleher
The Lender of Last Resort: A Historical Perspective 275

Comment by **David I. Meiselman** 319

Manuel F. Ayau
The Impoverishing Effects of Foreign Aid 323

Comments by **Sven Arndt** 335
J. Richard Zecher 339

Carlos Geraldo Langoni
Country Debt Problems: The Brazilian Case 343

Jan Tumlir
Economic Policy for a Stable World Order 355

INTRODUCTION

A PROPERTY RIGHTS VIEW OF THE DEBT CRISIS

James A. Dorn

As interest rates begin to edge upward and rescheduling pushes the debt burdens of Brazil, Mexico, Argentina, and other large debtor nations into the future, it is of the utmost importance to rethink the whole subject of international lending and the role of official agencies such as the International Monetary Fund (IMF). Unless we understand the origins and the development of the present debt crisis, we will not be able to offer rational policy alternatives to resolve the issue.

With this in mind, the Cato Institute held its second annual monetary conference, on "World Debt and the Monetary Order," January 20–21, 1984, in Washington, D.C. The proceedings of that conference, along with an edited version of Robert E. Weintraub's monograph *International Debt: Crisis and Challenge* (1983a), form the contents of this issue of the *Cato Journal.*[1]

The international debt problem offers an interesting opportunity to apply property rights theory and the theory of public choice to an important policy issue. The literature on the economics of property rights has identified important relationships among the existing property rights structure, incentives, and individual behavior affecting

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The author is editor of the *Cato Journal,* Washington, D.C.

[1] Weintraub's monograph played an important role in the legislative debate over increasing U.S. assistance to the IMF. He argued that the failure to increase IMF funding would not result in the collapse of the U.S. banking system, provided the Federal Reserve acted to prevent a contraction of the money supply (pp. 25–26). In the *Wall Street Journal* (16 May 1983c), he stated: "The IMF can play a constructive role in the rescheduling process. It can mediate differences. It doesn't need to give money to debtors to do this."

the use of scarce resources.[2] The theory of public choice, meanwhile, has added to our understanding of nonmarket decision making, and has helped to explain why the government typically fails to bring about an efficient use of society's resources. Together these disciplines suggest that a better understanding of the debt crisis can be obtained by looking at the underlying rights structure and incentives confronting the relevant actors in the world debt drama: government officials in less developed countries (LDCs), private and central bankers in industrialized-creditor nations, government officials in developed countries, and decision makers in multinational lending agencies, particularly the IMF.

A careful study of the costs and benefits facing these different individuals will help explain why we are in the present fix, with major debtor nations piling debt upon debt and threatening to default if the creditor nations and multinational lending agencies do not cooperate in rescheduling debt payments. All the parties involved, of course, are working in their (or their organization's) own best interest. But given the existing institutional framework, the pursuit of self-interest is not necessarily furthering the public good. Thus there is the danger that some of the debtor nations may default, and that the large U.S. banks may then turn to Congress (that is, the taxpayers) for relief. The recent increase in the U.S. quota to the IMF is, some people believe, a step in that direction.[3]

The papers in this volume examine the property rights framework under which the various parties in the debt crisis operate. The incentives confronting the critical debtor countries (Argentina, Brazil, and Mexico, or ABM) make it unlikely that they will fully repay their debts. Thus some policy measures have to be proposed that will allow the necessary adjustment process to occur, one that will enable these countries to achieve steady economic growth and service their debts. Are IMF conditionality agreeements the solution? What about converting ABM debt into equity or writing debts down to their true market values? Which of these options is the most efficient? Which is the most equitable? These are significant questions and are treated in detail in this volume. Meltzer, for example, thinks that an immediate move to revalue LDC debt at its true market value would make sound economic sense.

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[2] For a survey of that literature, see Furubotn and Pejovich (1972) and De Alessi (1980). A useful book of readings in the theory of property rights has been provided by Manne (1975). In this paper, the term "property rights" refers to an individual's effective rights to use resources and to capture the consequent rewards or bear the losses. In this general sense, property is a bundle of rights and can be viewed as the institutional constraints that help shape an individual's opportunity set. Changes in the configuration of effective property rights will therefore affect incentives and individual behavior. See McKean (1972, p. 177) and Furubotn and Pejovich (1972, p. 1139).

[3] Others, of course, will argue that the IMF funding increase was in the public interest and that without such an increase, disaster would surely have followed. There is no doubt that some banks and some debtor countries would have to make costly adjustments in the event IMF funding dried up. But mistakes unfortunately have to be paid for, and the longer the adjustment process is postponed, the greater the long-run adjustment costs will be. Thus the real question is: Who should pay? Those who initiated the crisis and prolonged it or taxpayers in general? These are important questions and are dealt with in this volume. (The papers by Jordan, De Grauwe and Fratianni, and Smith pay close attention to the public choice aspects of the debt crisis.)

What is the proper role of the IMF? Should it merely act to smooth the adjustment process by providing better information to lenders and borrowers? Or should it take a more active lending role? Property rights and public choice theory will help one answer these difficult questions. The present institutional structure, within which the debt crisis has emerged, is characterized by subsidized federal deposit insurance, a Federal Reserve Board that is not constrained by any effective monetary rule, a Congress that is subject to rent-seeking activity by domestic producers seeking protection from LDC exports and bankers seeking bail-outs and favorable regulations, official lending agencies such as the IMF and World Bank that are not guided by market criteria, and government planners in the LDCs who believe that state-owned enterprises can be made efficient. As long as these institutional arrangements and the incentives they generate persist, it is unlikely that the provision of "better information" to lenders and borrowers will improve the international allocation of funds.[4]

Should the IMF act as a lender of last resort (LLR) or should this function be reserved for the Federal Reserve? Will defaults by some of the large debtors, say Brazil and Mexico, cripple the banking system and result in another Great Depression? Critical questions, but ones best addressed by rigorous analysis instead of the emotionalism often encountered in the popular press.

Humphrey and Keleher show that under the present system in which the dollar is the key currency and floating rates are managed, the IMF has no LLR function. For the IMF to acquire such a function, we would have to move to a new world monetary order in which the IMF acts as a world central bank.[5] Is such a movement desirable if we want to achieve a more stable monetary order? Or would a more efficient route to stable money be to stay with floating rates and limit the Fed to a noninflationary path for M1 growth?

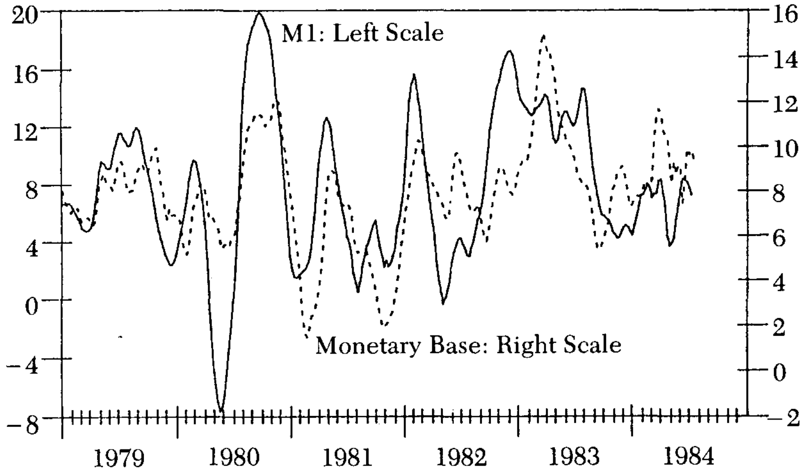
---

[4] The idea that giving individuals better information will not necessarily improve their efficiency has been clearly stated by McKean (1972). His conclusion is that "in trying to invent improved devices or institutional changes, or in launching new programs, we should keep the impacts on rights and opportunity sets in the forefront of our minds, and not just assume that good intentions pave the road to economic efficiency" (p. 186).

[5] Mundell (1983, pp. 207–9) has proposed "a trillion-dollar World Central Bank (WCB)" *in addition to* the IMF.

Weintraub has argued that the latter path would put us on a steady course of stable prices and economic growth.[6] If the Fed would limit the growth of M1 to a range of 0 to 2 percent and keep it there indefinitely, the certainty achieved would help reduce interest rates and promote world trade. The Fed's actual policy, however, has never approached this target range. Indeed, the Fed has never been subject to a monetary rule—there is no penalty for failing to hold the money supply to a noninflationary growth path. Figure 1 illustrates just how far the Fed is from achieving stable money; that is, from

FIGURE 1
GROWTH IN M1 AND THE MONETARY BASE[a]



[a]Growth is the annualized rate over 13 weeks ago; data are 4-week moving averages; and the latest data were plotted 9 July 1984.

SOURCE: Office of Monetary Policy Analysis, U.S. Department of Treasury.

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[6]For a discussion of Weintraub's monetary rule, see 1983a, p. 49, where he argues for a 0 to 2 percent target range for M1, and 1983b pp. 180–81. A complete list of Weintraub's monetary writings can be found in the *Congressional Record*-Senate, 21 September 1983, pp. S12626-27.

keeping the variability of money growth, whether measured by the monetary base or M1, in a noninflationary range.[7]

The importance of stable money and various institutional arrangements that could be used to achieve it was the subject of last year's monetary conference.[8] That topic is still important and must be addressed if the present debt crisis is to be resolved. The contention that in the absence of increased IMF funding there will be major defaults, leading to widespread bank failures and depression, is contested by a number of authors in this volume.[9] In particular, Brunner, Weintraub, and Vaubel emphasize that if the Fed does not let the money supply actually contract, as it did in the 1930s, then there is virtually no chance of banks "falling like ninepins."

From the viewpoint of the debtor nations, we see high and variable interest rates in the United States, growing government and deficits, increased protectionist measures against Third World products, and the same interventionist disease that plagues many of the debtor nations. We then, oddly enough, have policy makers in the free world telling the LDCs to "bite the bullet" and move toward liberal trade policies. What are the debtor nations to think? A look at the papers by Ayau, Langoni, and Tumlir will provide some revealing insights here.

Other questions arise in reading the papers in this volume. Is the IMF necessary to reduce transactions costs and coordinate lending to the LDCs? Is there a "market failure" in international lending, so that the IMF must internalize the externalities generated in the lending process? Or can the failures in the present system of international lending be attributed to government intervention? The papers in this volume are by no means in total agreement about the answers to these and to the other questions we have presented. It is clear, however, that if we are to answer these questions, we must not ignore the underlying property rights structure.

---

[7] Whether one agrees with Weintraub's particular monetary rule is not the issue here. The point is that the Fed has never been subject to a money supply rule and that without such a constraint, we are bound to experience erratic monetary policy (see *SOMC* 1984, especially pp. 6–7). Such a policy, of course, will distort rational economic calculation (see Dorn 1983). The fact that the Fed has never committed itself to a monetary rule was recently made in an interesting paper by Hetzel (1984). For a summary of Hetzel's paper, see Clark (1984).

[8] See "The Search for Stable Money," *Cato Journal* 3 (Spring 1983).

[9] An instructive example of a banker who apparently felt quite strongly about the importance of increasing the IMF funding, and the adverse consequences of denying it, is provided by New York Fed President Anthony M. Solomon's remarks before the Economic Club of New York last summer (1983, p. 2):

> Frankly, I find it baffling that there are elements in this country, and especially in our Congress, who can ignore the catastrophic effects that would result from not acting now to make resources available to the IMF quickly. Without the IMF at the pivot, the whole debt restructuring effort would be undermined, and needed new credits would be blocked. Outright defaults could actually happen. In the longer run, the consequences could also be grave.

Looking for ways to solve policy disputes by enlarging private property rights—and thus expanding opportunities for mutually beneficial exchanges—has long occupied economists. Nevertheless, many economic policy makers appear to undermine the importance of private property rights and the market-exchange process. Moreover, they fail to keep simple economic principles in mind when making policy decisions (see Buchanan 1979, chaps. 1,2,4; Krieger 1983). Ayau reinforces this point when he discusses the failure of economic education in the debtor-problem countries (DPCs).

A wider understanding of the institutional requirements for a smoothly functioning market economy—notably, private property, freedom of contract, and stable money—may not be a sufficient condition for resolving the debt crisis and stemming the rising protectionist tide, but it is certainly a necessary condition. Without such an understanding, it is unlikely that a majority of voters will be willing to accept the constitutional limits on the size and scope of government that are necessary to safeguard the freedoms essential to the market economy. The danger to democratic constitutions inherent in the protectionist policies of late is cited in Tumlir's paper.[10]

In conclusion, by considering the role of property rights, broadly speaking, we can enhance our understanding of the origins of the debt crisis and help construct viable solutions. As Vaubel (1983) has shown, the incentive structure confronting IMF officials creates a climate for overlending to high-risk LDCs. By subsidizing loans and holding out the promise of rescheduling, the IMF encourages high-risk LDCs to accumulate debts that they would otherwise not incur. In a similar manner, O'Driscoll and Short have shown that the existence of subsidized federal deposit insurance and the Federal Reserve's role as lender of last resort tend to increase the risk-taking activity of U.S. banks (see their paper in this volume). Likewise, the paper by Meigs illustrates the adverse effects regulations can have on the resiliency of the international financial system to adjust to the constant changes of the marketplace. In his opinion, additional regulation of international lending would only hamper the market adjustment process and lead to an inefficient allocation of scarce capital. More important, the use of coercion in renegotiating debt, according to Meigs, would seriously undermine freedom of contract, an essential component of private property.

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[10] For a further discussion of issues in what Buchanan has called "constitutional economics," see McKenzie (1984).

Even if one disagrees about the impact regulation has had on international lending and the debt crisis, there remains the erratic nature of Federal Reserve policy, which many observers consider to be of prime importance in explaining the debt problems of the LDCs. This too is a problem of property rights. Federal Reserve officials do not fully bear the costs of their policy decisions; for example, they are not penalized for high and variable inflation rates. Without monetary discipline, risk and uncertainty are increased and prudent lending decisions are made more difficult (see Schwartz's paper).

In addition to overregulation and excessive rates of monetary growth, U.S. economic policy has been characterized by continuous budget deficits. The persistence of federal deficits in the neighborhood of $200 billion will no doubt put further pressure on the Fed to monetize part of the domestic debt. If interest rates rise as a result, this would add fuel to the debt crisis. It is no longer possible to blame OPEC for the LDC's debt problems—a point Burnham brings out well in his paper. We must put our own house in order before advising others. A more stable U.S. macroeconomic policy, says Mussa, would benefit both the United States and the world economy.

The danger that lies before us, according to Weintraub, is that the Fed will get back on the inflationary roller coaster. The reflation will then simply put off the day of reckoning for the debtor and creditor countries. It seems fitting to end with his advice (1983a, p. 39):

> Reflation would be a quick fix, but only a temporary one. In time, accelerated inflation would raise interest rates and recession would follow. The debt problem would return bigger than ever. The economy would still be on a roller coaster. Reflation must be avoided.
>
> The challenge is to define the policies that will defuse the present debt crisis without doing more harm than good.

This volume attempts to meet that challenge.

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EDITOR'S NOTE

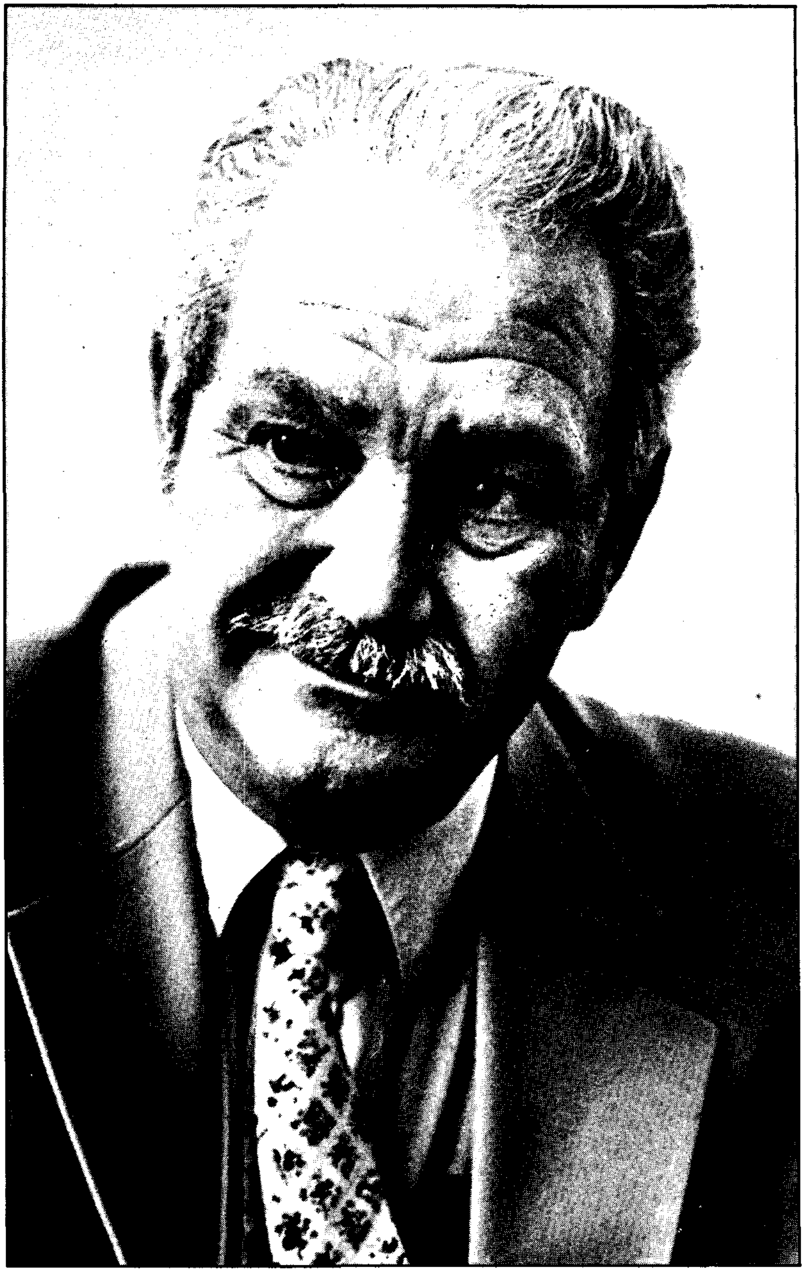
This issue of the *Cato Journal* is dedicated in memory of Robert E. Weintraub, senior economist for the Joint Economic Committee of Congress, who died September 12, 1984 in Washington, D.C. His passing marks the end of a distinguished career as a teacher, researcher, and policy adviser. One of Bob's final contributions was to help organize the Cato Institute's conference on "World Debt and the Monetary Order," upon which this volume is based.

Bob Weintraub saw an important relationship between domestic monetary policy and international financial stability. In his monograph *International Debt: Crisis and Challenge* (1983, p. 9), he argued that "The inflationary surge of the late 1970s to 1981 is legitimately viewed as the underlying cause of the present debt crisis." Thus he thought that any lasting solution to the international debt problem would require the United States and other developed nations to control inflation.

Those who continue to fight for monetary sanity owe much to Bob Weintraub. His legacy—in his writing and the hundreds of individuals he personally influenced—lives on as a vital force in this historic conflict. In a final tribute, Senator Roger W. Jepsen, for whom Bob worked during the last two and one-half years of his life, said:

> Bob's enthusiasm for his job, his candid manner of calling right "right" and wrong "wrong" and the sense of duty to and pride in his family—all of these qualities made him a standout in an uncertain world.
>
> I'll miss Bob's genius for explaining difficult economic theories in a relaxed and clear manner. I'll miss the certainty that he showed about who he was. I'll miss his friendship and his quick sense of humor. [Personal Letter, 21 September 1983]

I am sure that all those who knew Bob would agree with Senator Jepsen's assessment. They would certainly agree with Congressman Jerry Lewis' remark that "The passing of Bob Weintraub leaves a vacuum in the economics community and in Congress which will be difficult to fill" (*Congressional Record,* 14 September 1983). It is an honor to dedicate this issue of the *Cato Journal* to Bob's memory and to reprint his excellent monograph cited above.



Robert E. Weintraub
1925–1983

IN MEMORY
OF ROBERT E. WEINTRAUB

It is difficult to speak to you this evening in memory of our dear friend and colleague, Bob Weintraub—especially in words appropriate to his life, his spirit, his uniqueness, his accomplishments, and the void that has been left by his untimely death.

Bob was so close to so much of my own life for so long, since we were both graduate students at the University of Chicago more than 30 years ago, that, as life goes on, I find it difficult to believe that Bob is no longer with us. Yet, like many of you, I am reminded of Bob almost every day.

For years we saw each other frequently and we spoke almost daily, as Bob, with some puzzle and dismay, would tell me about the latest monetary statistics and the most recent Federal Reserve rationalization for why they were doing the best possible and much better than an ungrateful, wayward country deserved, or new research results, or an old idea that took on new and richer meaning, or Bob's struggle to convert good economics and an understanding of and a dedication to free markets and political liberty into effective and acceptable legislation, or Bob's great joy and pleasure he shared with his wife Sue at a family celebration, a visit with one of their children, an afternoon at the racetrack, an evening at the theater, or a trip to Europe, or Bob's outrage and disappointment at craven or misguided behavior and attitudes in and out of government, or his counsel, sometimes on the money, sometimes not, about the bond market or commodity futures, or about discussing and sharing so much in our working and personal lives.

For Bob, there was no clear distinction between his work and the rest of his life, a reflection of the fact that he was such a whole, such

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Remarks delivered by David I. Meiselman at a banquet in memory of Robert E. Weintraub, Senior Economist for the Joint Economic Committee of Congress, who died in Washington, D.C., on 12 September 1983. The banquet was held at the Cato Institute's conference on "World Debt and the Monetary Order," 20 January 1984, in Washington, D.C.

an integrated, such a complete person, what his forebears would call a mensch. He represented so well what, in another age would have been proudly labeled as the republican (small r) virtues of a good citizen of the republic, the virtues of wisdom, prudence, of generosity, of learning, of compassion, of responsibility, of fidelity—and for Bob an extra portion of fun and zest.

It is a great tribute to this country and to the American system of liberty that a man like Bob Weintraub was able to achieve so much and in so doing to contribute so much to the rest of us. Bob grew up in the Bronx and attended public schools, all under quite ordinary circumstances for the time and place. His parents were not far removed in time from the Pale of Eastern European Jewry. His father was a small businessman in the garment industry, first as a traveling salesman selling dresses. Later he opened a small dress shop in New York City. Bob's two brothers went into different businesses.

Bob started college at Williams College, and he and Williams chose each other almost by accident. Bob was surprised that he ever went to Williams, and Williams must have been surprised at having a freshman like him, with his gutsy street smarts that characterized Bob all through his life. He started college in the first year of our direct involvement in World War II. Like so many other college students, Bob signed up in the Navy V-12 program. At the end of his freshman year Bob was called to active duty and was sent to a V-12 unit at Dartmouth. After a heated dispute with one of his instructors, Bob left Dartmouth and became a Marine infantryman.

Bob spent the rest of the war in the South Pacific, landing and fighting with Marine amphibious and infantry units of the Marine Third Division on their bloody road from Guadalcanal to Iwo Jima. It was typical of Bob that, against the odds, he survived both the fighting itself and the bitterness and hatred that war breeds that poison the lives of victors as well as vanquished. I recall speaking with Bob after a trip to Japan he and Sue took a few years ago that he enjoyed immensely. He told me of the pleasure and the special interest he found in his contacts with the Japanese people. I knew some of Bob's war experiences and how deeply he felt about them, so I asked how he felt about Japan and the Japanese people in light of all the suffering, death, and destruction he had personally experienced. Bob turned to me and wisely said that war is essentially impersonal, that when it was over it had best be over, and that it serves no useful purpose to dote on old wrongs and old wounds. He was a fighter, he did not forget, but he was not a prisoner of old battles once the war was over, which is one reason he was able to work so successfully on Capitol Hill.

After the war Bob returned to Williams, received his B.A. in 1948, and then went on to graduate school at the University of Chicago. At Chicago he started serious study of economics, but like many of us returning veterans, he had no immediate or career goal of becoming either a professor or a professional economist. Also, like most of us, he started out not much different from the conventional New Deal liberal statist that dominated American universities at that time. It was Milton Friedman and the rest of the University of Chicago who shook him up and opened his eyes and his mind to the virtues and problems of free markets and free men. Although Bob later went on to achieve deserved fame for his studies in the field of monetary economics, he first specialized in labor economics. His Ph.D. dissertation, "The Productive Capacity of Rural and Urban Labor," was summarized in an article in *The Journal of Political Economy*. To help gather material for his research, and to help gather money to live on, Bob worked in the Ford assembly plant in South Chicago.

Bob's first professional job was at the National Bureau of Economic Research in New York, where, under the direction of Al Reese, he worked with Donald Jacobs, now Dean of the Graduate School of Management at Northwestern University, on re-estimating the consumer price index for the early years of this century. Their research showed that the old estimates were in error and that the correctly measured price index was significantly lower than originally estimated. Among other things, the revised price statistics eliminated an apparent earlier puzzle—why, in spite of substantial economic growth, there was little or no measured growth of real wages in the United States in the decade or so before World War I.

Bob continued in the labor economics area. He taught at Northwestern for a year before spending a decade, from the mid-1950s to the mid-1960s, teaching at City College of New York, where he had an unusually large number of outstanding students such as Sam Peltzman, Bette Mahoney, Dave O'Neil, and Alan Fechter. He wrote papers on wages, unemployment, and labor productivity, and was one of the first economists since Malthus to rigorously analyze birth rates and population trends.

Bob entered the field of monetary economics, almost by accident. I believe that I have some responsibility for that, and to some extent so does Allan Meltzer.

In 1963 Wright Patman finally attained the chairmanship of the Banking and Currency Committee of the House of Representatives. One of his first acts was to initiate an extensive study of the Federal Reserve, the first such congressional study in the then 50-year history of the Federal Reserve. He turned to Allan Meltzer for help in setting up and staffing the study. I was then at the Treasury working for Paul Volcker, which pleased neither of us. Allan suggested that Patman hire me to help initiate the study. Soon after, Bob was also hired to spend two days a week working for the Banking Committee while he continued teaching at City College. Five or six months later I left the Banking Committee to teach at Johns Hopkins. Bob assumed more and more responsibility for the Federal Reserve study, and became its senior author and supervisor. The extensive hearings and the study as a whole, especially the pathbreaking paper by Karl Brunner and Allan Meltzer, made an important contribution to lifting some of the mystery surrounding the process, the content, and the effects of monetary policies. The study also helped to initiate the application of positive economics to the analysis of how the Fed, in fact, carried out its monetary policy requirements.

Even after Bob moved to the West Coast to teach at the University of California, Santa Barbara, he maintained contacts with the Banking Committee as he started to write extensively in his new field of monetary economics, including a well received college text. In 1973, he was asked to return to the House Banking Committee on a full-time basis as senior economist with primary staff responsibility for monetary policy questions but involved also with other Banking Committee concerns.

For the next decade, Bob mainly worked on Capitol Hill. For a brief period in 1975 he left the House Banking Committee for the Treasury where he was chiefly involved in the New York City financial crisis. The experience left Bob even more skeptical about the feasibility and merit of government bail-outs and interventions in financial and other markets. On this score I recall Bob's telling me about the time he had phoned William Isaac, chairman of the Federal Deposit Insurance Corporation to congratulate him because, after the failure of the Penn Square Bank, the FDIC had agreed to guarantee only those deposits it had insured rather than, as the FDIC had usually done, bailing out all of the deposits and depositors. Bob then returned to Capitol Hill and became senior economist for the Senate Banking Committee. He later returned to the House Banking Committee before shifting to the Joint Economic Committee staff.

For some years Bob had been aware of the serious damage done by the Federal Reserve's discretionary policies—by money growth that was too high, leading to inflation; by unstable money growth, which was the primary cause of short-run economic instability; and by the costly and maddening consequences of the avoidable uncertainty generated by the Fed's erratic monetary policy. Bob was also convinced that, as in the 1930s, much of the explosive growth of government was a response to many of the consequences of poor monetary policy, and that little progress could be made in taming Leviathan until there was either a marked improvement in the Fed's performance under existing institutional arrangements or the adoption of a better set of monetary arrangements. As if still more evidence was needed, Bob would point to the inability of the Reagan administration to shrink government, or even to slow its growth significantly, once the Fed-induced recession started in mid-1981, six months after the new administration took office.

To improve the management of monetary policy that would be acceptable to Congress, which has the constitutional authority over monetary policy and the Federal Reserve, Bob developed the idea of monetary targets. Under his proposal, the Federal Reserve would be required to present to Congress a plan for M1 growth for the next year, linked to a procedure for what he believed would be effective congressional oversight.

In March 1975 Congress passed House Concurrent Resolution 133 that incorporated Bob's ideas. The resolution required that the Fed report targets for money growth and then report to Congress on the achievement of those targets. Bob, and many others, were optimistic that the targets would be a significant step toward the achievement of noninflationary, steady, and predictable money growth. Even though Congress did not mandate specific numerical targets for money growth, Congress did require that the Fed adopt a target. The clear sense of Congress was that the Federal Reserve would then take seriously hitting the target. Bob, and by Bob's account to me, such Capitol Hill veterans as Senator Proxmire, one of the supporters of the targets, never considered that the Fed would attempt to flout the intent of Congress and then succeed in doing so. Although Bob had a keen sense of Capitol Hill realities, it also came as a great and unpleasant surprise and a bitter disappointment that Congress, itself, would be so unmoved and unresponsive when the Federal Reserve, first under Arthur Burns, and then under Paul Volcker, turned the targets exercise into a disgraceful sham.

Bob felt deeply about the utter failure of the monetary targets he had fathered and the fact that, after all the research, after all of the conferences, after all of the congressional hearings, and after the legislation, itself, there had been essentially no improvement in Federal Reserve performance or in Federal Reserve accountability for their actions. And on Capitol Hill there had been little or no change in the longstanding failure of Congress to monitor the Fed effectively or to exercise its constitutional responsibility for monetary policy. In recent years Bob would often repeat Mike Hamburger's rhetorical question about the absence of significant structural change and the economic policies of both the Federal Reserve and the Reagan administration when Mike noted, "How can you expect things to be different when nothing has changed?"

We often discussed the fact, especially disquieting to students of Milton Friedman, that knowledge itself is rarely enough to ensure better public policies. We came to understand that rules determine, or at least fundamentally shape, results. Therefore, to achieve better results it was necessary to use knowledge to shape effective rules. Although Bob was generally a confirmed and cockeyed optimist, his optimism did not extend to the future conduct or results of monetary policy under current arrangements. Until his death five months ago, he continued to do research on workable monetary rules mandated by law.

During the years on the Hill, Bob was always engaged in serious economic research, mainly in monetary economics, in addition to the applied economics he practiced as a congressional staff economist and counselor. In this decade alone his work resulted in more than 30 publications. To the best of my knowledge, among the hundreds of congressional staffers Bob's research and publications were unique. His contributions have an important place in the growing body of research and analysis about the economic and political role of money and the conduct of monetary policy. I briefly note his research, now cited so widely, on the lagged connections between money and prices and on the political economy of Fed policies.

I note also Bob's imaginative plan presented to the Gold Commission in 1981 to restore the gold certificate reserve requirement as a means for achieving slow and stable money growth. Unfortunately, it failed to convince the Commission. It was not pure enough for the gold bugs, who also had other agendas; it was too threatening for supporters of the current flawed monetary arrangements. There are also the two studies he completed in the past year, "International Debt: Crisis and Challenge," and "International Lending by U.S. Banks: Practices, Problems and Policies," which, in my judgment, place in proper perspective the serious international debt problems being discussed at this conference.

And, during most of this decade Bob continued to teach in Virginia Tech's Graduate Economics Program in Northern Virginia to the delight of a new generation of grateful students.

Bob's lengthy and impressive bibliography does not adequately reflect his unique role on the Hill, in Washington, and in the economics profession. In a city much given to sham and to shameless self-serving abuse of the public trust and the powers of government, and in an area of economics and economic policy much given to illusion and profound ignorance, Bob consistently added an unusual note of unfailing dedication as well as refreshing candor and realism.

Yet, he was able to work with a wide range of people of differing political and economic persuasions and affiliations without compromising his own intellectual integrity and his dedication to liberty and the rule of law—even in the conduct of monetary policy. His advice, counsel, and strong shoulders were widely sought out and frequently employed. Some of the results of his work contained, in part, in the Monetary Control Act of 1980, are now seen in the systematic deregulation of the banking system and financial markets.

So, while we join Sue, their five children and the Weintraub family in mourning Bob's untimely death, both for their loss and ours, and as we try to understand better what shaped this man, we cannot help but celebrate the roots and the system that made possible such a full, vital, and memorable life that sets such a good example and standard for all of us and for our children. We thank God for Bob Weintraub's life and we are grateful for the many blessings Bob Weintraub bestowed upon us and upon the country he loved, whose essence he understood and which he always served with uncommon fidelity.

INTERNATIONAL DEBT: CRISIS AND CHALLENGE

Robert E. Weintraub

I. Introduction

Until the summer of 1982, the external debt problems of Eastern bloc and less developed countries (LDCs) were regarded as benign, or were ignored, by nearly all international financial and economic analysts and policy makers. Now, most observers share the conviction that these problems pose a current threat to the free world's financial and economic health and stability and must be dealt with quickly and forcefully. This study focuses on the present crisis. Longer term issues raised by the external indebtedness of Eastern bloc nations and LDCs will be dealt with in later studies.[1]

By all accounts, the external debts of Eastern bloc nations and LDCs are enormous. Government officials, financiers, economists, and the news media are urging that these countries be given help to cope. In opening hearings on "International Financial Markets and Related Problems" before the Committee on Banking, Finance, and Urban Affairs of the House of Representatives on 21 December 1982,

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The author was Senior Economist for the Joint Economic Committee of Congress when this article was written. He alone is responsible for the analysis and conclusions of this study. Research assistance was provided by Rajni B. "Bonnie" Ohri.

The present paper is an edited version of the author's monograph, *International Debt: Crisis and Challenge*, Fairfax, Va.: George Mason University, Department of Economics, April 1983. The Cato Institute gratefully acknowledges the right to reprint the major part of the monograph in this conference volume.

Brackets are used to indicate additions to the author's original text and footnotes. The text has been left basically intact, except for several minor deletions. Several tables have been omitted, and these are noted in the footnotes. As a result, the numbering of footnotes and tables in the present paper does not conform to the original.—Ed.

[1] [The author intended the present study to be part one of a three-volume series on U.S. bank lending to LDCs and Eastern bloc nations. Part two of the series was published by George Mason University in August 1983, and entitled, *International Lending by U.S. Banks: Practices, Problems, and Policies*. Part three was never initiated.]

Chairman St. Germain referred to this call for help as the "conventional wisdom." He said, "These hearings . . . come against a backdrop of news reports about impending requests for an enormous new funding of the International Monetary Fund. The conventional wisdom suggests that the Congress should quickly and quietly vote the new funds, accept the Administration's and the Federal Reserve's rationale, and ask questions later—if at all." But, should the United States help these countries? If so, how? These are the current policy questions. My purpose is to clarify the issues involved and to provide guidance to the public and to policy makers who must resolve them.

From 1973 to 1982, Eastern bloc nations and LDCs and their residents greatly increased their borrowings from lenders in the United States and other developed free world countries. Few worried as the external debts of these countries and their residents mounted. Now, however, their debts are viewed ominously. They are regarded as serious threats to world trade, political moderation in LDCs, and to the financial and economic health and stability of the United States and other developed free world nations.

Concern is growing over whether some Eastern bloc nations and LDCs will be able to service their debts. Defaults have been avoided to date only because the United States and other developed free world countries and the Bank for International Settlements (BIS) have provided emergency "bridge" loans, private creditors have postponed scheduled loan repayments and extended new credits, and the International Monetary Fund (IMF) has granted timely longer-term loans.

Some analysts worry that smaller banks, which have gone along until now with postponing scheduled loan repayments and extending new credits, will soon balk, especially at extending new credits. In part, smaller banks do not want to assume additional risks. In addition, their access to dollar deposits, especially in the Eurodeposit market, has been constrained in recent months by depositors' "flight to quality." Thus, even smaller banks that want to participate in extending new credits to debtor nations and their residents are finding it difficult at the present time. This increases the pressure on large banks, and some of them are thought to be growing nervous about increasing their exposure to defaults by Eastern bloc nations and LDCs.

If there are widespread, major formal defaults, many fear that the U.S. banking system would collapse, world trade would fall precipitously, and the U.S. economy would plunge into a depression as terrible as the one experienced in the 1930s. There is added fear that if LDC defaults are avoided by pressuring LDCs into draconian actions that decrease their imports and consumption, U.S. exports will be reduced and recovery from the 1981 to 1982 recession, which now appears to be under way, will be aborted. Such actions also could trigger widespread unrest in developing countries and political change—for example, the formation of a "debtors' cartel."

To some observers, the United States is caught in dangerous waters where, like the straits between Scylla and Charybdis, avoiding one disaster leads to another. If defaults and political change were the only dangers, we could steer a course between the two. But, in setting our policy course, it would be a mistake to assume that these are the only or even the greatest dangers we face. The greater peril may lie in the side effects of policies adopted to help debtor nations cope.

The remaining sections of this study examine the evolution and dimensions of the external debt problem confronting the Eastern bloc nations and LDCs (section II); the logic of the popular worst-case scenarios and the more likely sequence of events (section III); and solutions to the current Eastern bloc and LDC debt crisis (section IV).

II. Evolution and Size of the Problem

How Did It Happen?

The external debts of non-OPEC developing countries grew only moderately before the quadrupling of oil prices in late 1973 and early 1974. At the end of 1973, their medium- and long-term indebtedness was about $100 billion.[2] After 1973, as Chairman Willard C. Butcher of the Chase Manhattan Bank observed, "the pace of lending accelerated with the world's major banks playing the leading role." By the end of 1982, non-OPEC developing countries' medium- and long-term indebtedness was $520 billion.

The 1973 and 1974 increases in oil prices provided both financial resources and motive for a jump in external borrowing by non-OPEC developing countries. The increases in oil prices generated huge current account surpluses for OPEC members. Every year, billions of dollars were transferred to OPEC members from oil importing nations. The aggregate current account surplus of OPEC member nations rose from only $7 billion in 1973 to $68 billion in 1974.

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[2] Estimates of indebtedness usually exclude short-term debt; that is, debt with an original maturity of less than one year. However, the magnitude of the problem is reasonably accurately measured by medium- and long-term debt alone because the short-term foreign financial liabilities of non-OPEC developing countries are not significantly larger than their short-term foreign financial assets.

In the mid-1970s, while planning what to import, Saudi Arabia and other OPEC members used their new surpluses to purchase deposits from free-world banks, thereby providing financial resources for expanded bank lending to non-OPEC developing countries. At the same time, higher oil prices caused non-OPEC developing countries greatly to increase their credit demands. Non-oil producing countries had to do so in order to finance the huge current account deficits they experienced as they sought to maintain physical oil imports at pre-1973 levels and to continue to provide for growth through capital imports. Oil producing countries outside OPEC, such as Mexico, did so in order to develop their oil resources and to provide for growth in other sectors of their economies.

The match was obvious. In the mid-1970s, banks recycled OPEC's surpluses to non-OPEC developing nations. If banks had not matched the new petro-deposits to the new credit demands of non-OPEC developing nations, if they had loaned the funds to other entities instead, some of these other entities or those to whom the funds were transferred, further down the line, would have done the recycling. Where arbitrage opportunities exist, there are certain to be arbitragers.

By 1978, the OPEC current account surpluses virtually disappeared as OPEC nations more closely matched imports to exports. They quickly reappeared as a result of the effects of the Iranian revolution on oil prices in 1979 and 1980. However, by 1982, they had dwindled once again.

The credit appetites of non-OPEC developing nations did not decline as the current account surpluses of OPEC members fell in 1978 and again after 1980. As David P. Dod of the Federal Reserve Board's Division of International Finance pointed out (*Federal Reserve Bulletin*, September 1981): "An increase in public-sector and private borrowing combined has been necessary in view of economic policies in developing countries that have contributed to higher, sustained deficits in the current account of their balance of payments." The underlying policies were extremely rapid money growth and huge budget deficits continuing year after year. These policies produced inflation. With exchange rates fixed or at least sticky, inflation reduced exports and increased imports, and thus acted to increase current account deficits.

Non-OPEC developing countries had to borrow to finance their current account deficits or else abandon the policies that were perpetuating the deficits. Not all of them perpetuated inflationary policies. Some, especially in Asia, reduced money growth in the early 1980s. But some Latin American nations pursued inflationary policies throughout the late 1970s and early 1980s. These countries had to borrow.

Banks in the United States and other developed free world countries were eager to lend to Eastern bloc nations and LDCs in the late 1970s and early 1980s in part because they underestimated the risks, but also because lending opportunities in their own markets were squeezed. Their own market opportunities were squeezed because real wages increased unsustainably, especially in Western Europe. European trade unions were able to raise nominal wage rates faster than prices were rising. The ratio of wages to Gross Domestic Product in most major Western European countries increased substantially in the late 1970s. As a result, the demand for loans by businesses in Western Europe was dampened, and U.S. and other multinational banks limited their lending activities in Western Europe and expanded them in the United States and Eastern bloc nations and LDCs. And because the increased competition from multinational banks in U.S. markets left many primarily domestically oriented U.S. banks with fewer loan customers in the United States, many of these banks were impelled to begin or to step up their lending to Eastern bloc nations and LDCs.

The Organization for Economic Cooperation and Development (OECD), in its *External Debt of Developing Countries 1982 Survey* [hereafter, *1982 Survey*], estimates that bank medium- and long-term loans to non-OPEC developing countries increased from $69 billion at year-end 1977 to $182 billion at year-end 1982, an increase of $113 billion. Other private lending to borrowers in these countries increased from $20 billion to $46 billion. These loans do not include credits to finance exports to these countries, which jumped from $45 billion to $105 billion during the same period.

Export credits aside, the new private credits to non-OPEC developing country borrowers were used to finance private business investments and government construction and development plans, including delivery of extended and upgraded education services. However, some of the new credits were used to finance increased consumption. Not all of the investments that were made with the new loans were sound, nor were all of the construction and development plans sensible. Further, parts of some loans were dissipated in corruption. By the second half of 1982, it was clear that there were problems.

Referring to the massive debt structure built up in recent years, Wall Street financial analyst Henry Kaufman said (*Washington Post*, 19 September 1982): "It has financed . . . not a large amount of economic efficiency, but for a long while a large amount of inflation. But now we have it, it is there, it has a maturity schedule and it has an interest payment." A comprehensive analysis of what went wrong would not help us to clarify whether the United States should help debtor nations to cope, and, if so, how; nor would it provide guidance to the public and to policy makers, who must resolve the issues. To most analysts, however, it is clear that lenders as well as borrowers are to blame for the abuses and excesses that occurred.

The OECD put it this way in its *1982 Survey:* "It appears in retrospect that certain developing countries have borrowed unwisely (as indeed have some other borrowers), using some of the resources to finance consumption and investments of dubious value, rather than to strengthen their productive potential." They were able to do so because creditors, primarily banks, did not constrain their lending by adhering to normal prudent standards. Rather, "overeagerness by banks to lend has sometimes allowed borrowing governments to delay necessary adjustments."

Some would absolve banks from blame. They argue that banks would have been less eager to lend to developing countries if they had had reliable, current information about the total indebtedness of the countries to whom they were lending. Through 1982, each bank had timely information only on its own loans. However, the argument is not persuasive. One large regional bank, the National Bank of Detroit, as reported by Sanford Rose of the *American Banker*, stopped lending to Mexico by the end of 1981 based on an in-house analysis of the risk involved. Furthermore, all banks should have understood the risk of operating without full information and tempered their eagerness to lend to developing countries accordingly. As it was, some banks made loans in excess of their capital to countries that are now having trouble meeting their debt-service obligations.

Regardless of how much blame should be assigned to borrowers and how much to lenders, by the summer of 1982 it was clear that some LDCs and Eastern bloc nations were having trouble servicing their debts, that their bankers were becoming concerned and reluctant to extend new credits and in some cases to renew maturing credits, and that some banks, including some in the United States, had made loans to these countries in excess of their capital, sometimes in disregard of the advice of in-house specialists on sovereign risk. These elements define the current crisis.

Those who look for proximate causes will tie the emergence of the present debt crisis to the 1981 to 1982 disinflation and recession. During recessions, especially when accompanied by substantial disinflation (to build a springboard for sustainable growth), as in 1982, debts are not easily serviced by debtors, nor are they automatically renewed by lenders. This view of the emergence of the debt problem has been popularized by the press. The *New York Times*, for example, wrote on 9 January 1983, that "what has really gone wrong in the third world can be traced to the weak world economy rather than to an overextension of credit by greedy commercial bankers or extravagant borrowing by imprudent leaders of developing nations." The *Washington Post* wrote on the same day, "The recession has sent to the brink of bankruptcy countries once thought to be impeccable credit risks . . . [depressing] demand prices for commodities that are the mainstay of the developing world."

However, disinflation and recession in the 1981 to 1982 period did not occur in an historical vacuum but followed a wave of inflation that began in 1977. The debt crisis can be tied to that inflationary surge. Advocates of this view need not dispute that the debt buildup financed "a large amount of inflation," as Kaufman pointed out, or that initially the inflation was associated with robust growth figures. Early on, the chain of causation definitely runs from debt accumulation and money creation to inflation and growth. Later on, however, the chain of causation runs the other way—from inflation to debt accumulation and recession. Inflation undermines household, business, and government balance sheets. It creates an atmosphere in which debtors flourish and become eager to borrow, often without regard to risk, while lenders downgrade risks. As a result, careless practices creep into the lending process and indebtedness increases dangerously. At the same time, even if it is periodically ratcheted upward, inflation inevitably produces recessions. Since, as balance sheets deteriorate, production and spending fall, especially capital formation and investment spending.

The inflationary surge of the late 1970s to 1981 is legitimately viewed as the underlying cause of the present debt crisis. The 1981 to 1982 recession period was the trigger event. The recession suppressed demands for goods and services generally, and because commodity and raw materials markets are relatively competitive, commodity and raw materials prices declined relatively more than the prices of intermediate and finished goods. In fact, the latter continued to increase on average.

On balance, non-OPEC developing countries export commodities and raw materials and import intermediate and finished goods. Thus, the 1981 to 1982 recession raised their trade and current account deficits. At the same time, at least until recently, high interest rates raised the costs of financing current account deficits and refinancing maturing debt. As a result, many non-OPEC developing countries have found it difficult—and sometimes impossible—to meet their debt service obligations.

High interest rates, which resulted primarily from the inflationary surge that preceded the 1981 to 1982 recession, had an even more devastating impact on the ability of some LDCs to meet their debt-service obligations. During the inflationary surge of the late 1970s, the interest rates at which Eastern bloc nations and LDCs borrowed were generally below the U.S. inflation rate. As a result, the real cost of carrying external debts was negative during this period. However, market interest rates rose dramatically in the 1979 to 1981 period, only recently have they dropped below 1979 levels. As short-term market interest rates rose, loan rates also rose both on new and maturing loans and on debt subject to variable or floating interest rates. In 1981 and the first half of 1982, the interest rates paid on debt subject to floating interest rates averaged substantially higher than the U.S. inflation rate. For nations with a large part of their debt consisting of floating-rate loans, the consequences were deadly.

The OECD *1982 Survey* estimates that for Argentina, Brazil, Mexico, and their residents, "about three-quarters of their total [gross] debt was due to private markets at variable interest rates and without official support from OECD governments [compared with under 20 percent for most developing countries]." A 1 percentage point increase in the London Interbank Offered Rate (LIBOR) means an increase in yearly net interest payments, calculated on 1982 indebtedness, of $593 million for Mexico, $455 million for Brazil, and $205 million for Argentina. It is easy to see how higher interest rates in the 1981 to 1982 period greatly strained the abilities of these nations to meet their debt service obligations.

The "debt-bomb" can be disarmed. Economic recovery is under way in the United States and other developed countries. That will increase developing countries' capacities to service their external debts. Interest rates are down. That will reduce the burden of their debts. But even though the bomb need not go off, and in my view won't, it might. The merchandise trade surpluses of developing nations will not increase automatically in future years. Investment income will not necessarily grow. Loan interest rates, which have fallen substantially since the spring and summer of 1981, might rise again. If the trade and investment accounts of developing nations do not improve, or if they worsen, and if interest rates rise again, then in the absence of generous loan reschedulings or heroic official aid, widespread, major formal defaults are inevitable. It is important, therefore, to understand how widespread, major debt repudiation would affect the U.S. banking and monetary systems and how it would affect U.S. exports, GNP, and employment. Whether we should help developing nations cope with their debts depends crucially on the analyses of these issues. Before analyzing these issues, however, it is useful to discuss the dimensions of the external debts of Eastern bloc and less developed countries, the exposure of U.S. banks, the abilities of individual countries where U.S. bank loans are concentrated to meet their debt service obligations, and whether our banks have enough capital to absorb defaults.

The External Indebtedness of Developing Countries

How much do Eastern bloc nations and LDCs owe in total? Hobart Rowan wrote (*Washington Post,* 19 October 1982): "No one really knows." But he reported that "a high-level World Bank official said that if everything were known about the super-secret world of banking, the real global total would probably add up to something close to $750 billion." Official estimates are somewhat lower.

The World Bank estimates that at year-end 1981 the medium- and long-term debts of 98 developing countries totaled $462 billion. The International Monetary Fund estimates that the medium- and long-term external debts of non-oil developing countries totaled $437 billion at year-end 1981 and rose to $502 billion at year-end 1982. The OECD estimates that the outstanding disbursed medium- and long-term external debts of non-OPEC developing countries, including Eastern bloc nations, totaled $445 billion at year-end 1981 and increased to $520 billion at year-end 1982. Including members of OPEC, the medium- and long-term indebtedness of the world's developing countries is estimated to have been $530 billion at year-end 1981 and to have increased to $626 billion at year-end 1982.

Official estimates exclude short-term debt; that is, debt with an original maturity of less than one year. The 1982 gross short-term external indebtedness of developing countries exceeded $120 billion for non-OPEC developing countries and may have been as much as $175 billion for all developing countries. However, the short-term foreign assets of developing countries, including non-OPEC developing countries, are about the same as their short-term foreign debts. Thus, it is appropriate to ignore short-term debt in estimating the total external indebtedness of developing countries. In contrast, the medium- and long-term foreign assets of developing countries fall far short of their total external medium- and long-term debts.

The OECD data show that U.S. and other free world bank medium- and long-term loans other than export credits were $182 billion,[3] or 35 percent of the grand total, and that more than 20 percent of all loans were at "concessional" rates and terms.[4] From an analytical standpoint, the importance of the first fact is that exposure of the free world's banking system to defaults by Eastern bloc nations and LDCs is much less than their total indebtedness; excluding export credits, it was $182 billion at year-end 1982. The importance of the second fact is that the burden of the external debts of developing countries cannot be gauged by looking only at the size of their debts.

The total medium- and long-term debt of Eastern bloc nations and LDCs and the bank subtotal are dramatic statistics, but they are not meaningful ones, since they differ depending on what nations are aggregated in estimating them, and the bank debt subtotal also depends on whether export credits are included. Moreover, the fact is that there is no aggregate Third World debt problem. Banks are exposed significantly in some developing countries and hardly at all in others. Further, different countries have different capacities to handle debt, and their capacities will be affected differently by the same event; for example, by a change in the price of oil or in interest rates. Debt, as the OECD points out, is "a phenomenon which manifests itself at the level of individual countries, rather than in aggregates and averages." Country specific data on the exposure of U.S. banks and the ability of LDCs to service their external debts are discussed in the sections that follow.

Exposure of U.S. Banks

In its *1982 Survey*, the OECD estimated that if all borrowers, sovereign and private, in all non-OPEC developing countries in Eastern Europe, Latin America, the Caribbean, Asia, and Africa repudiated their year-end 1982 external debts, U.S. and other free world banks would face balance sheet write-offs of $159 billion. The OECD, in its tabulation of data on "Lending and 'Exposure' of Banks to Non-OPEC Developing Countries," provided the following estimates of outstanding disbursed amounts at year-end 1982:

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[3] In testimony before the House Banking Committee on 2 February 1983, Federal Reserve Board Chairman Paul A. Volcker stated that non-OPEC developing countries owed banks here and abroad $268 billion and their total debt was $550 billion in mid-1982. However, the Federal Reserve's $268 billion subtotal includes certain export credits that are not included in the OECD's $182 billion subtotal. This accounts for the major part of the difference between the two figures.

[4] [See Table 1, p. 13, in *Crisis and Challenge*, 1983.]

Bank Credits and Exposure		$ Billion
1. Short-term credits		134
2. Medium- and long-term credit		231
A. Officially guaranteed export credits	49	
B. Financial loans and credits	182	
3. Total outstanding (1 + 2)		365
4. Deposits with BIS banks		157
5. Total net bank "exposure" (3–4)		208
6. Net bank "exposure" excluding guaranteed export credits (5–2A)		159

The 1982 exposure of U.S. banks was less. Data from the Federal Reserve Board's June 1982 *Country Exposure Lending Survey* show that, as of June 1982, adjusted for guarantees, U.S. banks were owed $343.6 billion by foreign borrowers.[5] However, $196.7 billion of this total was owed by borrowers in developed countries. With the exception of Spain, the risk of default by borrowers in developed countries is trivial. Borrowers in non-OPEC developing countries in Eastern Europe, Latin America, the Caribbean, Asia, and Africa owed $108.2 billion to U.S. banks at mid-year 1982. Of this amount, $69.6 billion was owed by borrowers in Latin American and Caribbean countries and $27.7 billion by borrowers in Asian countries.

The Federal Reserve Board data also show that the nine largest U.S. banks were owed $65.6 billion by borrowers in non-OPEC developing countries. The next fifteen largest banks were owed $21.7 billion, and all other banks were owed $21.1 billion by borrowers in these countries. Loans to borrowers in Eastern Europe, Latin America, the Caribbean, Asia, and Africa comprised 32 percent of all foreign loans made by the nine largest banks, 33 percent made by the next fifteen largest banks, and 29 percent made by all other banks.

Using the Federal Reserve Board's survey data, a country-by-country examination of U.S. banks' foreign loans show concentrations to borrowers in seven non-OPEC developing countries: Argentina, Brazil, Chile, and Mexico in Latin America, and Korea, the Philippines, and Taiwan in Asia. The exposure of U.S. banks to defaults by borrowers in these seven countries was $79.5 billion in mid-1982. Nearly 75 percent of all U.S. bank lending to non-OPEC developing nations was to these seven countries: $25.2 billion was to Mexico, $20.5 billion to Brazil, $8.8 billion to Argentina, $6.1 billion to Chile, $9.2 billion to South Korea, $5.3 billion to the Philippines, and $4.4 billion to Taiwan.

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[5] [See Table 2, p. 15, in *Crisis and Challenge*, 1983.]

It appears, then, that among non-OPEC developing countries, U.S. banks would be highly exposed if Mexico and Brazil repudiated their debts, and exposed to a significant extent if South Korea, Argentina, Chile, the Philippines, and Taiwan defaulted. This is not to say that formal defaults by borrowers in other nations would not prove troublesome. Among OPEC nations, however, the exposure of U.S. banks in June 1982 was significant (over $3 billion) only in Venezuela, where U.S. banks were owed $10.7 billion. Among developed nations, exposure was substantial in all G-10 [Group of Ten] countries,[6] plus Switzerland, Australia, Denmark, Norway, South Africa, and Spain. Of these countries, however, the risk of default is considered trivial except in the case of Spain, where it is considered low but nontrivial. U.S. banks were owed $6.7 billion by borrowers in Spain at midyear 1982.

Ability of LDCs to Meet Debt Service Obligations

The OECD *1982 Survey* estimates that debt service payments of developing countries on their medium- and long-term external debts reached $131 billion during 1982, with interest payments accounting for $60 billion and amortization for $71 billion. For non-OPEC developing countries, interest payments were $50 billion and amortization $49 billion. Debt service payments by these countries to banks totalled $48 billion.

The OECD data on medium- and long-term indebtedness show that in 1982, 51 percent of the aggregate external debts of non-OPEC developing countries ($266 billion divided by $520 billion), 64 percent of their total debt-service payments ($63.3 billion divided by $93.8 billion), and 67 percent of their interest payments ($33.2 billion divided by $49.7 billion) was held and paid by borrowers in newly industrializing countries (NICs).[7] NICs—the most advanced and developed LDCs—paid more interest relative to their indebtedness than other non-OPEC developing countries. The data also indicate that both interest payments and total debt service (interest plus amortization) were somewhat higher percentages of both exports and GNP for NICs than for low income countries (LICs), middle income countries (MICs), and OPEC members.

The ratios of interest payments and total debt service payments to exports and GNP for NICs as a group are not crisis numbers. For example, 15 percent of aggregate NIC export earnings and 3.3 percent of GNP would fully cover the interest payments on NIC medium- and long-term external debts. However, it is not the group totals and ratios that matter. As the OECD notes, "Especially within the group of the NICs, there are enormous differences in the debt-service ratios of individual countries."

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[6] [G-10 countries here are Belgium-Luxembourg, Canada, France, West Germany, Italy, Japan, Netherlands, Sweden, and the United Kingdom.]

[7] [See Table 3, p. 17, in *Crisis and Challenge*, 1983.]

Country specific data show that nearly 45 percent of the total $131 billion debt-service payments made by developing countries in 1982 were made by Mexico, Brazil, Argentina, Chile, Venezuela, South Korea, the Philippines, and Taiwan—the developing countries where the exposure of U.S. banks to debt repudiation is significant. Debt service payments by these countries, plus Spain, in 1982, and the amounts they owed to U.S. banks at midyear 1982 are given in Table 1. Spain is a developed country, but since some analysts consider the risk that it will default to be nontrivial, it is listed here.[8]

TABLE 1

DEBT SERVICE PAYMENTS BY DEVELOPING COUNTRIES
(Billions of Dollars)

Country	Estimated Debt Service Payments in 1982	Amount Owed U.S. Banks at Midyear 1982
Mexico	18.5	25.2
Brazil	15.2	20.5
Venezuela	7.8	10.7
Spain	5.7	6.6
Argentina	4.9	8.8
South Korea	4.8	9.2
Chile	3.3	6.1
Philippines	2.1	5.3
Taiwan	2.0[a]	4.4
Total	64.3	96.8

[a] A precise estimate for Taiwan is not available. The figure given is a maximum.

SOURCES: OECD and Federal Reserve Board.

Traditionally, the ability of a nation to service its medium- and long-term external debts is measured by comparing its total debt-service charges (interest plus amortization) to its exports and its GNP, taking into account its reserves. These data are available only with a lag, however. Data for 1981 and 1982 are now available (see Table 2),[9] but they indicate only what was true, not what is now true. Conditions

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[8] [*In the original monograph*, Table 4.]

[9] [In the original monograph, Table 5.]

TABLE 2

ESTIMATED MEDIUM- AND LONG-TERM DEBT SERVICE PAYMENTS, RESERVES, EXPORTS, AND GNP FOR COUNTRIES WHERE THERE IS A NONTRIVIAL CHANCE OF DEFAULT AND U.S. BANKS ARE SIGNIFICANTLY EXPOSED, 1981 AND 1982
(Billions of Dollars)

Country	Debt Service Payments 1982	Reserves 1981	Exports 1982	GNP 1981	Ratio of Debt Service to Exports	GNP
Mexico	18.5	4.2	26.3	230.7	.70	.080
Brazil	15.2	6.7	27.0[a]	274.2	.56	.063
Argentina	4.9	3.4	12.0	152.1[b]	.41	.024
Chile	3.3	3.3	6.1[a]	31.4	.54	.099
Venezuela	7.8	8.7	24.5[a]	67.0	.32	.090
South Korea	4.8	2.7	27.6[a]	63.4	.17	.063
Philippines	2.1	2.3	8.5[a]	39.7	.25	.040
Taiwan[c]	2.0	—	—	—	—	—
Spain	5.7	11.4	20.5[a]	—	.28	—

[a] 1981.
[b] 1980.
[c] Data are not available for Taiwan as it is not a member of the IMF.

SOURCES: World Bank, OECD, IMF.

now, early in 1983, are very different from what they were in 1981 and 1982; and they are almost certain to change as time passes. As conditions change, the debt-burden ratios change. In addition, traditional comparisons sometimes are distorted. For example, a financially strained country might shorten the maturity of its debt, reducing its payments to service its medium- and long-term debts. Thereby, its medium- and long-term debt-service ratios would be improved, even though its problems had worsened.

Because of the inevitability of change and the possibility of data distortions, the data for 1981 and 1982 must be used with utmost caution. With this caveat in mind, the data assembled in Table 2 show that the debt-service ratios of South Korea, the Philippines, and Spain were below or close to 1982 averages for all non-OPEC countries and that Venezuela's debt service to exports ratio was only moderately above the average.[10] Further, Spain and Venezuela had large reserves at the end of 1981, although there are reports that they fell in 1982. In short, South Korea, the Philippines, Spain, and Venezuela were well able to service their debts in the 1981 to 1982 period, while Mexico, Brazil, Argentina, and Chile had difficulties. Brazil and Mexico were the most financially strained.

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[10] [The debt service to exports ratio for all non-OPEC countries in 1982 was .24, and the debt service to GNP ratio was .056. See Table 3, p. 17, in *Crisis and Challenge*, 1983.]

Economic conditions have changed in recent months. On the whole, it appears that it will be easier for all of the nations listed in Tables 1 and 2, excepting possibly Mexico and Venezuela, to service their debts in 1983 than it was in 1981 and 1982. First, it now seems clear that interest rates will be much lower, on average, in 1983 than in 1981 and 1982. As a result, all debtor nations will find it somewhat easier to service their debts in 1983 than in 1981 and 1982, especially nations with high proportions of their total debt in floating interest rate loans. A 1 percentage point decrease in LIBOR decreases Mexico's annual debt service payments by $593 million, Brazil's by $455 million, and Argentina's by $205 million. The calculations, which are based on 1982 indebtedness, assume constant spreads between floating loan rates and LIBOR. These are significant reductions. For Mexico, debt service payments are reduced by 3.2 percent for each percentage point reduction in loan rates; for Brazil, by 3 percent; and for Argentina, by 4.2 percent. LIBOR has fallen about 7 percentage points since mid-1982.[11] Even though spreads have increased somewhat, it is clear that in 1983, Mexico, Brazil, and Argentina will find it much easier to service their external debts than they did in 1981 and 1982.

Second, we are likely to see lower oil prices in 1983. A fall in the price of oil will decrease Mexico's and Venezuela's export earnings, decreasing their ability to service their debts. At the same time, lower oil prices will increase the ability of the other seven nations to service their debts, since their expenditures on imports will decrease. Interest rates could also decline further, helping even Mexico and Venezuela meet their debt service charges, although perhaps not enough to offset the loss of export earnings. Finally, partly as a result of the fall in the world price of oil, a stronger recovery from the recession that has afflicted developed countries is now expected. For most nations, this too will enhance their ability to service their debts.

Based on conditions as they now appear (early 1983), only Mexico and possibly Venezuela among countries where U.S. bank loans are concentrated and there is a nontrivial chance of default will have difficulty meeting their debt service obligations in the foreseeable future. Even these countries have improved prospects compared to the 1981 to 1982 period in some respects.

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[11] [The six-month LIBOR decreased from 15.625 percent in June 1982 to 9.44 percent in April 1983. Since April 1983 the rate has *increased* to an estimated 12.50 percent in June 1984. (Data from the Federal Reserve Bank of New York.)].

Ability of U.S. Banks to Absorb Defaults

The ability of a bank to absorb debt repudiation depends critically on its capital. At midyear 1982, the total capital of U.S. banks was $66.2 billion: $27.1 billion represented the equity of the nine largest banks, $12.7 billion the equity of the next fifteen largest banks, and $26.4 billion the equity of all other banks. Loans to all developing countries at midyear 1982 were $131 billion, or about twice total capital. Loans to non-OPEC developing countries were $108 billion, or 1.6 times capital.

Country specific data on the dollar volume of loans by U.S. banks in the aggregate, classified by size, at midyear 1982 by the nine countries where debt problems significantly threaten U.S. banks show that if all nine countries repudiated their external debts and loans to them had to be written down to zero, the loss would represent 150 percent of the capital of our largest banks.[12] Defaults by Mexico and Brazil alone would wipe out 95 percent of the capital of the nine largest U.S. banks and 74 percent of the capital of the next fifteen largest banks.

In considering the possibility of formal defaults, however, it should be kept in mind that immediate write-downs of loans in default would neither be necessary nor desirable. The regulators can allow banks time to write down defaulted loans, and it would be disruptive for them not to do so. Sudden, sharp net worth reduction from writing down defaulted loans all at once could force some banks to close and others to be merged into stronger institutions, and would require many banks to liquidate loans in order to rebuild their capital to loan ratios. Although total lending (by all financial institutions) would not fall as a result, assuming responsible Federal Reserve behavior, significant local adjustments could be required. Nothing would be gained by this. Defaulted loans can be written off slowly, since bank capital tends to increase over time. Paul A. Volcker, Chairman of the Federal Reserve Board, stressed the latter point in a 30 November 1982, letter to Senator William Proxmire. Over the long run, he wrote, "it is reasonable to expect that the capital of the lending banks will increase at a rate of about 10 percent per annum."

In the event of defaults, given adequate time, banks collectively can absorb the losses involved. Banks that made the loans in default would have to reduce dividend payments as their defaulted loans were written down and most of them will find their profits reduced, but as long as there were profits the defaulted loans could be written down in time.

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[12] [See Table 6, p. 22, in *Crisis and Challenge*, 1983.]

III. Worst-Case and More Likely Scenarios

On 12 September 1982, Leonard Silk *(New York Times)*, reporting on the Toronto meetings of the International Monetary Fund and World Bank, wrote,

> . . . the mood was more anxious and the warnings more dire than at any such gathering in memory.
>
> Just before the sessions began, Denis Healey, the British Labor Party's shadow Foreign Secretary and former Chancellor of the Exchequer saw the Toronto meeting of the I.M.F. as the "last chance to save the world from a catastrophe even greater than the slump of the 1930s."
>
> Countries such as Mexico, Poland and Argentina, he warned, found it impossible to pay their existing debts, let alone raise the capital to stay afloat. Many third-world countries, he said, face the prospect of economic collapse, political anarchy and starvation, adding: "The risk of a major default triggering a chain reaction is growing every day."

How seriously should such nightmare scenarios be taken? What actually would happen if one, several, or many Eastern bloc nations or LDCs repudiated their external debts? Suppose that some LDCs with large debts announce that they cannot or will not reschedule them, that they are not interested in renegotiating more favorable loan rates, even if lenders are willing to do so. Rather, they announce that they are not going to pay back their external debts, nor are they going to pay the interest on the loans.[13] Would U.S. banks "fall like ninepins?"[14] Would trade between these and even other LDCs and developed free world creditor nations stop? Would the U.S. economy plunge or sink into a 1930s depression?

Will Our Banking System Collapse?

Fear of widespread bank failures, banks falling "like ninepins," has made Eastern bloc and LDC external debt problems a major news story in recent months. The *New York Times*, for example, reported on 10 October 1982, that "it is even conceivable that, in desperation, Mexico might join together with other countries and declare a unilateral moratorium on their debt repayments. . . . That, of course, could be disastrous for the world banking system and could cause the collapse that many people have been speculating about."

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[13] The analysis that follows and the conclusions that are drawn from it would be substantially or substantively changed if formal defaults by Eastern bloc nations were used to trigger events.

[14] [The expression, "fall like ninepins" was used in the *Wall Street Journal's* 10 November 1982, scenario of the debt crisis. This scenario was described in *Crisis and Challenge*, pp. 24–25.]

However, under analysis, the threat of widespread bank failures, of the collapse of our banking system, is found to be imaginary. Although some banks might fail, there is no reason why banks should "fall like ninepins," provided that the Federal Reserve "furnish[es] an elastic currency," as it is charged under law to do, and that bank regulators use common sense in dealing with the loss of bank capital from LDC defaults. These are the only safety nets required to keep our banking system functioning.

Heroic actions by policymakers are not needed to install the safety nets. The chairman and members of the First Federal Reserve Board, the chairman and directors of the Federal Deposit Insurance Corporation, and the Comptroller of the Currency need only give banks that hold defaulted loans on their books time to write them off. And the Federal Reserve, acting in its capacity as the nation's monetary authority, need only perform its long assigned "lender of last resort" role in a timely fashion. In essence, the Federal Reserve must keep the nation's money supply from contracting in the event of a run on banks.

Because the banking system collapsed in the early 1930s, some believe that it could happen again. As William R. Cline wrote in a 1982 essay for the Joint Economic Committee, "Most analysts consider such a scenario to be remote, although there is a historical precedent from the 1930s." However, what happened in the 1930s could have been prevented if the Federal Reserve had kept the money supply from contracting, as it could have done.

In the early 1930s, fear of bank failures drove depositors to demand payment in currency in massive measure. Banks liquidated other assets to replenish the currency they paid out. They called in demand loans, did not renew maturing term loans, and did not make new loans. As a result, the money stock, M1, fell by 27 percent, from $26.1 billion to $19.2 billion, between June 1929 and June 1933. The contraction of the money supply greatly exacerbated the economic contraction of 1929 to 1933.

The Federal Reserve could have supplied banks with reserves by making open market purchases or reducing the discount rate to encourage discounting on whatever scales were required to prevent a fall in M1. There was no statutory or logical reason for it not to have done so. If it had, the fall in M1 would have been prevented and the decline in economic activity would have been small.

Discussing why the Federal Reserve failed to carry out its responsibilities in the early 1930s would take us too far afield. The crucial point is that the Federal Reserve still has the power to prevent monetary contractions in the event of runs on banks.

A run on banks today definitely is possible in the event of LDC defaults. Deposits in banks with substantial loans to LDCs or Eastern bloc nations, especially those holding defaulted loans, might be drawn down by worried depositors, and that would threaten the survival of those banks. However, such withdrawals would not threaten the banking system as a whole with an epidemic of failures, nor the economy with depression, unless worried depositors withdrew their money in currency. In that event, the continued functioning of the banking system would be threatened only if the Federal Reserve did not replenish the reserves lost because of the currency drain. Federal Reserve failure to act would compel banks to contract their deposit liabilities by reducing their loans and loan commitments. However, the Federal Reserve could easily replenish any lost reserves by purchasing U.S. Treasury securities on the open market or discounting eligible bank loans.

Assume that worried depositors demanded payment on their checkable deposits, saving accounts, and matured and maturing time deposits. Some would do so by transferring their deposits directly to other banks, others by writing checks to nonbank third parties, and others by demanding payment in currency. To the extent that depositors transfer their money from one bank to another, the banking system's consolidated deposit and reserve accounts would be unaffected, ignoring changes that could arise from the redistribution of deposits and reserves across deposit types and reserve classifications. What some banks might lose, other banks would gain. A zero-sum switch would also hold in the case of deposits that were withdrawn from problem banks by depositors writing checks to third parties. Whether those checks were written to purchase stocks, bonds, goods and services, or to paydown debts, payees' banks would gain the reserves and, directly or as a corollary, the deposits that payers' banks had lost. Systemwide accounts also would not be affected if some banks drew down their deposits in other banks. Neither the banking system's consolidated reserves nor its systemwide deposit liabilities are changed when interbank deposits are drawn down.

Even if depositors of problem banks insisted on payment in currency, there would be no difficulty if the currency were redeposited in other banks. It does not matter whether the redepositing is done by former depositors of banks with defaulted loans or by persons and businesses who carry out transactions with them. If the currency were retained by the public, however, if the fear that motivated depositors to demand currency from certain banks spread to include the safety of deposits at all banks, there could be a systemwide problem. If the public's preferences for holding currency vis-à-vis deposits were permanently increased by the LDC defaults because of fears about the continued functioning of the banking system, a contraction of the money supply would ensue unless the Federal Reserve took preventive actions. However, the Federal Reserve can take preventive actions easily enough.

Assuming responsible Federal Reserve behavior, there will be no drop in the nation's money supply in the wake of LDC defaults. This means that banks will not "fall like ninepins." The nightmare case assumes that concerns about the safety of deposits in some banks are contagious. As a reult, deposits are converted to currency on a massive scale leading to multiple contractions of loans, deposits, and the money supply. It is further assumed that the process cannot be contained. The case is weak. The first assumption, that worries about the safety of deposits in banks with problem foreign loans will spread to cover the safety of deposits in other banks, is dubious and, moreover, is not sufficient to make the case. The second assumption, that the process cannot be contained, is definitely unwarranted. Even if worried depositors withdrew their deposits in currency from both problem banks and unexposed banks, the process could be contained by appropriate Federal Reserve open market purchases or discounting. These actions would prevent the money supply from contracting and the banking system from collapsing.

Widespread defaults by LDCs would not lead to the collapse of U.S. banking and money systems. They could lead to (1) a change in the composition of the money supply because the public may want to hold more currency relative to deposits, and (2) redistribution of deposits and reserves from banks with defaulted and exposed loans to other banks. Neither of these changes would have major perverse repercussions on the banking system (or the macroeconomy). To the extent that the public's preferences for currency increased, the banking system would be trimmed down by LDC defaults but hardly collapsed, and the money supply need not be affected. Some would even regard the trim-down of the banking system favorably. To the extent that deposits and reserves are redistributed, banks that had been least mindful of the risks involved in extending loans to LDCs and Eastern bloc nations would lose market shares to their more prudent competitors. Many also would view this development favorably.

Data on bank capital and loans to LDCs and Eastern bloc nations show that for some U.S. banks, these loans exceed their capital (see section II). That means they could be declared bankrupt by the bank regulators in the event of widespread, major LDC defaults. It would be both unrealistic and foolish, however, for the bank regulators to close a bank or merge it for this reason.

It would be unrealistic to require that defaulted loans be written down to zero immediately after the default is announced. Placing a value of zero on repudiated loans assumes that the defaults will be permanent and never corrected and also that there will be no market price above zero for the loans. More important, it would be foolish for the regulators to require full and immediate write-offs of defaulted loans even if there were no nonzero prices for them and no reasonable prospect of payment. Defaulted loans should be written off over a period of years, and there is no reason why banks should not be given the time.

Even if they are given the time to write off defaulted LDC loans, some banks could find that they have to restrict or even contract loans to U.S. borrowers in order to bring their capital to loan ratios up to standard. That could cause painful local adjustments, which, however, would be minimal compared to what would be required if they were not given adequate time. Moreover, to the extent that some banks contract U.S. loans, other banks and nonbank financial institutions (savings and loan and other nonbank depositories, insurance companies, factors, etc.) will increase their lending, provided that the Federal Reserve supplies sufficient reserves to prevent a money supply contraction. The Federal Reserve may have to supply more reserves to maintain the same level of money, M1, and banks with resulting capital adequacy problems may have to call in or constrain U.S. loans; but total loans from all financial institutions to all U.S. borrowers need not fall.

Given commonsense behavior by bank regulators and appropriate actions by the Federal Reserve, the collapse of our money and banking systems can be ruled out even in the event of widespread defaults by LDCs. The U.S. banking system might be trimmed down, some banks could fail even if given time to write off LDC loan losses, and some painful local adjustment could be required. But the monetary and banking systems will continue to function, nonbank financial institutions will make up any falloff in bank lending, and our macroeconomic performance will sustain no blows that cannot be dealt with.

Will Defaults Depress World Trade?

World trade depends strategically on the continued availability of finance. As stated in OECD's *1982 Survey,* "In most DAC [Developed Assistance Committee] countries, a substantial part of bank credits to LDCs is related to export financing." The *Survey* estimates that export credits extended by the United States and other DAC countries[15] to non-OPEC developing countries totaled more than $100 billion at year-end 1982. DAC export credits were 20 percent of the total medium- and long-term external indebtedness of non-OPEC developing countries. These credits define the rock-bottom estimate of the importance of finance to trade between developed and non-OPEC developing countries.[16] In a more fundamental sense, however, nearly all of the external credit provided to non-OPEC developing nations and their residents is used to finance imports, reflecting the consideration that current account deficits have to be financed by borrowing or direct investment. If the required financing is not forthcoming, imports are likely to have to be cut to close the gap.

Debt repudiation by some non-OPEC developing countries would decrease lending by current creditors to the countries that defaulted. Creditors as yet not involved in lending to these countries could become emboldened to start lending to them, since their slates would now be free and clear of burdensome loans. But it is unlikely that new creditors would fully take up the slack. Formal defaults also would reduce unguaranteed lending by private creditors in developed countries to solvent developing countries and their residents. Default risks might even be revised upwards for loans to developed countries and their residents, which would reduce lending to those borrowers. It is almost a certainty, then, that if there are widespread, major formal defaults, there will be less private unguaranteed finance to lubricate the engines of international trade.

To some extent, less finance would be needed because the current account deficits of nations in default would be reduced since they will not be paying interest. However, it seems unlikely that some shortfall in export finance will not emerge. Unless the gap is filled by guaranteed loans, official aid, multilateral assistance, or loans from

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[15] [See Table 1, p. 13, in the original monograph.]

[16] The OECD notes that in addition to medium- and long-term export credits, "banks are providing considerable amounts of short-term credits with an original maturity of under one year (for both trade and roll-over purposes)." OECD external debt statistics do not include credits with an *original* maturity under one year. This omission is not serious, however, because for non-OPEC developing countries as a group, their short-term foreign assets are about the same as their short-term foreign liabilities.

CMEA countries (an improbable outcome), imports would have to be cut by most nations, especially developing nations. As a corollary, exporters would have to retrench, especially in developed countries.

Dr. Otto Emminger, former president of the German Federal Bank, told the Fifth Quadrangular Conference of the Center for Strategic Studies in September 1982 that

> a general move toward underlending would have on major effect. It would deprive a great number of developing countries of an essential source of balance-of-payments financing. . . . Last year the banks provided, on a net basis, $35 billion for the financing of developing countries. That is about one-half of the total net borrowing of these countries in this year. Now if there is too abrupt a cessation, or decline, in this lending, there may be a financing gap that cannot easily be filled by other institutions. And this might force a number of deficit countries to restrict their imports very sharply.

It is clear that the effects of formal debt repudiation on international financial flows and thereby on export and import industries throughout the free world would not be pleasant. But it is easy to overstate the case.[17] Another Great Depression can be ruled out.

Will Defaults Lead to Another Great Depression?

Discussions of the debt problems of Eastern bloc nations and LDCs are haunted by the specter of the 1930s. If the problems are not solved, so the story goes, if some of the nations are compelled (or impelled) to repudiate their external debts, the end result will be another Great Depression, an economic contraction on the order of magnitude suffered in the 1930s.

How could this happen? In the most popular nightmare scenario, the chain of causation leads from defaults to the collapse of the U.S. banking and monetary systems to the collapse of economic activity. But, as discussed earlier, this hypothesis assumes perverse actions by the bank regulators and irresponsible behavior by the monetary authorities.

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[17] For example, in a front page *Washington Post* story on the Mexican debt crisis, 30 January 1983, Don Oberdorfer wrote, "Today about 20 percent of U.S. industrial output is for export involving one of every six U.S. production workers." Some readers might infer that if we don't resolve the Mexican and LDC debt crises, one of every six U.S. production workers will become unemployed. That inference is not warranted. Not all of our exports are sold to Mexico and other LDCs. We export industrial output to Japan, England, and other developed countries. According to *Time* magazine (10 January 1983), only one in every twenty manufacturing workers is employed producing goods for export to developing countries.

The analytical road from defaults by LDCs to another Great Depression does not have to pass through the collapse of our banking and monetary systems. A very different chain of causation has been hypothesized. It passes through the collapse of international trade.

Time magazine, in its 10 January 1983, cover story "The Debt-Bomb Threat," reported:

> The nations that buy many of the industrialized world's goods are the same ones that have borrowed so heavily. Any economic contraction on their part would boomerang back in the form of less demand by them for imports. The resulting deepening recession, so the theory goes, would further hurt the poorer countries, and so on and on. Once started, the process would be difficult to stop. The development dreams of the third world would come to a halt, stock markets would tumble, unemployment would soar, and world economic conditions would rival those of the 1930s.

To demonstrate that a lot is at stake, *Time* noted that:

> More than 40 percent of U.S. exports of commodities and services and one American manufacturing job in 20 hinge on sales to developing countries.

There is an element of truth in *Time's* scenario, but its conclusion is much too dismal. No doubt economic contraction in LDCs would compel a very painful adjustment in the United States. It would not, however, lead to an unending downward spiral of economic activity. Trade with developing nations would not cease if some repudiated their external debts. Even if it did, the effects on U.S. production and employment and unemployment would be far from cataclysmic.

The figures presented by *Time* cannot be used as is in evaluating the magnitude of the effects decreased exports to the developing world would have on total U.S. output and employment. Stating that 40 percent of U.S. commodity and service exports and one out of every twenty manufacturing jobs "hinge on sales to developing countries" can be misleading.

First, the term "developing countries" is too broad. It includes OPEC members, countries that do not find it difficult to service their debts, and countries whose external debts are largely to international agencies and other official lenders, often at low concessional interest rates. On average, OPEC members are creditor nations, and it is difficult to believe that those non-OPEC countries that can service their debts or that receive loans at concessional rates will repudiate them. At most, trade with these countries will fall only marginally, even if there are widespread loan defaults by other developing nations.

Second, it is difficult to believe that trade with nations that repudiate their external debts will be reduced to zero. At least some trade-related financial arrangements will be continued. Some new ones, with creditors as yet not involved, could be started; the slates of debtor nations will be wiped clean by their defaults and thus it will be relatively less risky to lend to them now. Alternatively, nations that default can use the money they get from exporting to finance imports on a cash basis; they will no longer be paying interest. There also will be barter and so-called countertrade arrangements where exporters accept goods from cash-short countries that can be exchanged for dollars or for other goods.

Third, although one in twenty U.S. manufacturing jobs and 40 percent of U.S. exports may "hinge on sales to developing countries," today only one job in five in the United States is a manufacturing job and exports are only 12 percent of GNP. Thus, only one in every hundred jobs and 4.8 percent of GNP "hinge on sales to developing countries" (where $.01 = .05 \times .20$ and $.048 = .40 \times .12$).

Finally, it must be understood that in market economies contractions of some sectors are eventually compensated for by expansions of other sectors. If trade declines, some of the resources previously employed in export industries will relocate in industries that produce goods and services previously imported, or close substitutes for them. There is an equilibrating mechanism at work, even though it does not work instantly or painlessly.

Taking these several factors into consideration, the effects of the falloff in U.S. exports that could be expected to result from major and widespread debt repudiation by developing countries would not be large enough to create another 1930s depression. Given the state of the art, it is impossible to say by how much U.S. real GNP would fall and unemployment would rise in the event of widespread, major defaults; but, all things considered, the fall in GNP is unlikely to exceed 1.5 percent and the rise in unemployment is unlikely to exceed 0.5 percent. These estimates are set forth as benchmarks for putting the debt crisis in perspective and helping to evaluate proposed solutions. I make no claim about their accuracy other than that they do not appear unreasonable.

What is Likely to Happen?

Even though permanent default is not in the long-run interests of debtor nations, their short-run interests might be served by debt repudiation. Former Secretary of State Henry Kissinger has warned (*Newsweek*, 24 January 1983):

> Because the debtors can never escape their plight unless they receive additional credits, the comforting view has developed that no debtor country would dare default and wreck its creditworthiness. Unfortunately political leaders march to a different drummer than financial experts. They see the political interests of their country through the prism of their own survival. If pushed into a corner, a political leader may well seek to rally populist resentment against foreign "exploiters." This will surely occur if the so-called rescue operation concentrates primarily on the repayment of interest. A blow-up is certain sooner or later if debtor countries are asked to accept prolonged austerity simply to protect the balance sheets of foreign banks.

William Ogden, vice president of the Chase Manhattan Bank, recognized—as did Kissinger—that if permanent defaults are to be avoided, debtors must be "economically capable of servicing debt over the long run [and] not so committed to ideological objectives as to give little if any weight to achieving reasonable long-run performance. . . ." He told the Manhattan Institute for Policy Research (22 October 1982) that if these conditions were satisfied,

> there is a *negligible* risk of permanent default or debt denial in sovereign lending because sovereign borrowers cannot cease to exist. Permanent default implies both a long-term loss of access to international private capital markets and a sharply reduced ability to utilize the international financial service network that is essential to the ordinary conduct of foreign trade. It implies that the great bulk of the international trade of a country in permanent default must be carried out on a government-to-government barter basis. Such restrictions would enormously circumscribe the pace of economic development for a country so affected. The negligible risk of permanent default arises out of the borrowing countries' perceptions of self-interest.

One need not agree with Ogden that nations that repudiate their debts will lose access to international private capital markets. By eliminating their debts to current creditors, these nations become A-1 risks to new creditors. Nonetheless, his conclusion, that debtor nations would rather not default and will not do so unless "pushed into a corner," is reasonably assumed. Financially strained debtor nations will take measures that involve reasonable costs and risks to avoid default, particularly if their creditors will "work with them."

The risk of formal debt repudiations also depends on the behavior of creditors. Formal defaults are not in their best interests, so the threat of default is likely to trigger offers by creditors that debtors will find difficult to refuse, or suggestions by debtors that creditors will find agreeable. Specifically, creditors faced with impending defaults will offer to or agree to delay scheduled loan principal payments and even interest payments. The September 1982 IMF/World Bank "Special Study" *(Institutional Investor*, September 1982) noted that "the number of borrowers tottering on the edge of default or bankruptcy, hence, the amounts involved, is simply staggering. So bankers have been forced increasingly to turn to one device to avoid such calamities: rescheduling."

Rescheduling can be one-sided, but it is more likely to involve concessions by both banks and debtors. In two-sided arrangements, banks stretch out scheduled loan payments by as much as ten years and often allow up to five years grace on any repayment. They also extend new credits. In return, debtors may agree to pay interest rates higher than prevailing market rates but conceivably below the interest rates on the original loans. There is also usually a rescheduling fee of 1 percentage point on rescheduled loans and 1.25 percentage points on new loans. Finally, but perhaps most important, debtor nations adopt policies that promise to increase their exports and improve their trade and current account balances. Such policies are likely to be unpopular in the short run but constructive in the long run.

Through rescheduling, banks are able to avoid or at least delay having to write off or even write down loans that are in jeopardy. In addition, banks benefit from any rescheduling fee and higher than market loan rate on rescheduled and new loans. Finally, to the extent that debtors are perceived to be improving their trade and current account balances, banks benefit by being able to raise deposits at lower interest rates than they otherwise could. That alone can be incentive enough to reschedule.

Debtor nations benefit from rescheduling not only because they avoid default, but because it reduces their short- and near-term debt-service payments by postponing principal repayments, and sometimes their interest payments, and can provide them with additional, new loan capital. Austerity measures and any rescheduling fee and higher than market interest rate that they might have to pay can be well worth those gains. If they are not, debtors will balk and still easier terms will be negotiated, though in some cases the process might break down.

What it comes down to is this: When debtor nations do not have the money to meet their debt-service obligations, their debts can be rescheduled and their debt-service payments adjusted by their creditors. That is the alternative to default. Rescheduling produces basic benefits for both banks and debtors. Banks do not have to write down problem loans. Debtor nations avoid the onus of default. Rescheduling is more attractive to creditors if debtors take hard steps to improve their trade and current account balances and agree to rescheduling fees and to higher than market interest rates on rescheduled loans and any new loans. It is more attractive to debtors if banks agree to long stretch-outs of existing loans and extend new credits. The alternative to reaching an agreement is usually dismal to one or both parties. Thus, rescheduling, not repudiation, is the likely event in the present Eastern bloc and LDC external debt crisis.

The initiative in the rescheduling process is sometimes taken by debtor governments, sometimes by creditor banks, and sometimes by governments acting unilaterally or in concert with international lending agencies. In recent months, short-term "bridge" loans have been granted to debtor nations on the brink of default by the Federal Reserve and the Exchange Stabilization Fund of the Treasury and by other countries' monetary authorities acting alone and through the Bank for International Settlements. Usually, these bridging loans have been made for 60 to 90 days on the condition that the borrowing nations seek long-term loans from the IMF. The IMF, in turn, has made its loans conditional on (1) debtor nations taking steps to increase exports and investment and decrease imports and consumption, and (2) bank creditors restructuring existing loans and extending new credits.

Recent developments confirm that debt repudiation is unlikely and that rescheduling will be the probable response when loans are in danger of default. In recent months, bank loans have been rescheduled and new private and IMF long-term credits have been extended to a number of Eastern bloc nations and LDCs, including Argentina, Brazil, and Mexico.

Even if there are no defaults, there will be changes, some of them unwelcome, as a result of the debt crisis. First, rescheduling signals that the quality of bank loan portfolios is less than was assumed when the loans were made. As a result, other factors the same, banks that made loans to Eastern bloc countries and LDCs will have to pay higher interest rates than their competitors to attract and hold deposits, and spreads on loans to Eastern bloc nations and LDCs will increase. However, rescheduling will reduce the size of these effects if debtor nations are perceived to be improving their trade and current account balances. The resulting net changes in relative deposit interest rates will be unfavorable to banks that made risky foreign loans. But these changes should not be viewed as unwelcome. In a market system, banks that make risky loans should have to pay higher deposit rates to ensure even reasonable prudence in lending practices and risky borrowers should have to pay higher loan rates.

Second, debtor nations have to improve their trade and current account balances in order to meet the new debt-service payments schedules. The Council of Economic Advisers (CEA) points out in its *1983 Economic Study to the President:*

> Much of this trade balance improvement will probably come through reductions in imports, involving painful reductions in output and real wages in the debtor countries. This will also depress demand for the products of industrial countries—particularly the United States, which has especially close trading relations with some of the major Latin American debtors. The debt problem of the developing countries may worsen the U.S. trade balance by $10 to $20 billion and reduce U.S. GNP by one-half percentage point or more from the level it would otherwise reach.[18]

Finally, at least some of the measures that debtor nations take to improve their trade and current accounts balances—that is, cutting imports, cutting government spending on consumption, and so forth—will be unpopular. Thus, the rescheduling process could be difficult to adhere to long enough to achieve success, and it could give rise to political action by debtor nations. It is more likely, however, that some adjustment will be made in the rescheduling programs, specifically by easing their austerity elements. However, such adjustments could be a trap.

What Are the Dangers?

Rescheduling does not solve the problem; it simply buys time. The underlying assumption is that given time and the liquidity that the rescheduling agreements provide, debtor nations can and will increase their capacities to service their external debts, or exogenous events will do it for them. However, there are two grave dangers in this approach.

First, the premise of rescheduling, that the crisis is one of too little liquidity and that given time and adequate liquidity debtor nations will be able to meet their debt-service obligations, may be wrong. Exogenous events may not be favorable. The steps that debtor nations take to improve their trade and current account balances may be too austere to adhere to for a long enough time to be successful, or they may not be austere enough to work, or they might be simply ignored. As a result, any increases in capacities to service external debts would be marginal, and the rescheduling process will have to be both extended and expanded over and over again. That means increased exposure for banks and increased official aid. The indebtedness of Eastern bloc nations and LDCs would rise, as would their debt-service obligations, both absolutely and relative to their capacities to service their debts. Thus, rescheduling would pour more and more money down what could turn out to be a rathole. We could ultimately confront the same defaults we are now trying to avoid and with larger amounts of debt involved. We must be alert to this danger.

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[18] The CEA's estimate of a "one-half percentage point or more" reduction in GNP differs substantially from the estimated 1.5 percent GNP reduction given earlier in this section. One reason for the difference is that the CEA's estimate is not based on the widespread formal default case, as the earlier estimate was, but on LDCs adopting austerity measures to avoid defaults.

Second, there will be an attempt to ensure that rescheduling works by again courting inflation. Most analysts agree that even a modest economic recovery in OECD countries which is sustained through 1984 and 1985 will allow the rescheduling process to work. But policy makers in developed free world countries may try to boost the recovery that now seems under way by pursuing reflationary policies. Reaccelerating inflation in the United States and other developed free world countries would increase the demand for the goods debtor nations export. That would no doubt help them meet their debt service payments, since their demand for imports will not increase as rapidly.[19] Reflation would be a quick fix, but only a temporary one. In time, accelerated inflation would raise interest rates and recession would follow. The debt problem would return bigger than ever. The economy would still be on a roller coaster. Reflation must be avoided.

The challenge is to define the policies that will defuse the present debt crisis without doing more harm than good. It is taken up in the fourth and final section of this study after a brief discussion below of the political dangers of IMF austerity programs that are part of the rescheduling process.

The Political Dangers of IMF Austerity Conditions

In a 21 February 1983, article entitled "IMF Austerity Prescriptions Could Be Hazardous," *Business Week* reported that, "The prospect economists and bankers find most frightening is that austerity could ignite a political explosion." It is difficult to evaluate whether this hypothesis is true. However, it is possible to deduce what such an explosion would produce. *Business Week* referred to "riots" in Argentina and Bolivia and concluded, as have Kissinger and others, that "it would be a mistake to think that default would be beyond a government that is growing increasingly panicked as it tries to implement IMF-ordered austerity." In this regard, the article reported that "some experts speculate that overextended countries might band together in a debt cartel. . . ."

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[19] The prices of goods that LDCs export are on average cyclically more sensitive than the prices of goods they import. Thus, their trade balance deteriorates in periods of world recession, like the 1981 to 1982 period, and improves in expansionary and inflationary periods.

Curiously, *Business Week's* conclusion is reassuring. In essence, *Business Week* and the "experts" to whom it referred are stating that any "political explosion" will erupt in formal defaults or debt repudiations, possibly major and orchestrated. They do not raise the specter of Russian- and Cuban-sponsored revolutionaries taking over still other LDCs because of IMF "austerity prescriptions," and they do not do so for good reasons. Russian- and Cuban-sponsored revolutions have not been impelled by economic austerity programs to solve external problems in the past. And, if the IMF's prescriptions turn out to be intolerably austere and threaten the survival of a nation's political authorities, the political authorities will scrap the IMF's conditions and, if necessary, repudiate their nation's debts. That way they will remove the threat to their survival and head off unwelcome political changes. In short, it would appear that the worst we can expect politically is widespread, major defaults, identically the same as the worst we can expect financially and economically. We can live with that.

Widespread, major formal defaults, whether spontaneous or orchestrated by a "debtors' cartel," would not generate catastrophic economic and financial conditions. The financial and economic problems that result can be dealt with without major disruption; not without some painful adjustments and shifts of resources, but given responsible Federal Reserve actions and commonsense behavior by the bank regulators, there will be no major, enduring economic or financial disruption.

IV. Solutions

In the second half of 1982, it became clear that some Eastern bloc nations and LDCs could not service their external debts and that the solvency of some of their creditors was threatened. For U.S. banks, the external debts and economic problems of Brazil and Mexico and, to a lesser extent, Argentina, Chile, and Venezuela are especially troublesome.

The U.S. Solution

On 21 December 1982, Treasury Secretary Donald Regan told the House Banking Committee that "the U.S. strategy to deal with current strains on the international financial system contains five key elements." The first calls for "orderly, but effective domestic adjustment efforts by each country concerned." On 14 February 1983, Secretary Regan told the Senate Banking Committee that this

> will entail multi-year efforts, usually involving measures to address some combination of the following problems: rigid exchange rates; subsidies and protectionism; distorted prices; inefficient state enterprises; uncontrolled government expenditures and large fiscal deficits; excessive and inflationary monetary growth; and interest rate controls which discourage private savings and distort investment patterns.

In supportive testimony before the House Banking Committee on 2 February 1983, Federal Reserve Board Chairman Paul A. Volcker stressed the need for

> determined action by major borrowing countries to change their economic policies . . . to cut down on very high rates of inflation and budget deficits, to establish realistic foreign exchange rates and domestic interest rates, to encourage greater economic efficiency, and, as a result, to aim for substantial reductions in external [trade and current account] deficits.

The second element of the U.S. strategy calls for "readiness to provide official financing." Secretary Regan identified the IMF as "the key institution for this purpose" stating that the Reagan administration favored "strengthening IMF resources. . . . by an increase from $67 billion to $99 billion (plus) an expansion of the IMF's General Agreement to Borrow (GAB)" in an amount equal to $12 billion. All IMF members would be given access to GAB funds under certain circumstances. Chairman Volcker testified that the IMF plays "the key coordinating and substantive role." Only the IMF, he said, "can effectively combine the several ingredients necessary to encourage both sound adjustments and necessary financing. . . ."

The IMF has requested that the quota increases and the new GAB money be paid into the IMF by the end of 1983. The U.S. share would by $5.8 billion of the proposed quote increases and $2.6 billion of the proposed GAB expansion. The total U.S. cost would be $8.4 billion. The United States would provide $8.4 billion of assets that can be converted by the IMF quickly into purchasing power. When converted, the United States would receive an equivalent book-entry claim on the IMF which, however, could be used only for purchasing foreign currencies to support the dollar.

Third, the U.S. strategy calls for "continued commercial bank lending." Chairman Volcker called for "arrangements among the bank creditors to provide enough continuing credit to maintain continuity of payments and a financial environment in which orderly adjustment programs can be implemented."

The fourth element, as stated by Secretary Regan, calls for "governments and central banks in lending countries to act quickly to respond to debt emergencies when they occur." In support, Chairman Volcker stated that we must assure, "in specific instances, short-term 'bridging' credit by national monetary authorities, acting bilaterally or through the Bank for International Settlements . . . to meet minimum and immediate liquidity requirements while adjustment and borrowing programs are being arranged."

Finally, the U.S. strategy calls for "economic policies in the major industralized countries that will produce economic growth." Chairman Volcker testified that this part of the program would establish "an environment of sustained recovery and expansion in the industralized world," a "critically important" priority.

Evaluation

The First Element. No approach to the international debt crisis can succeed if it does not achieve substantial reductions in the trade and current account deficits of debtor nations. The question is how to achieve these reductions. Secretary Regan and Chairman Volcker have suggested a number of constructive possibilities. The keystone is that financially strained debtor nations "establish realistic foreign exchange rates" either by devaluation or floating. In time, this would increase the exports of debtor nations and decrease their imports, improving both trade and current account balances. It would also attract new foreign direct investment, making it easier to balance current account deficits. To validate the new exchange rates, it is important that debtor nations reduce governmental expenditures and moderate money growth permanently in order to prevent renewed downward pressure on exchange rates. Finally, Secretary Regan and Chairman Volcker correctly urge debtor nations to abandon subsidies, protectionism, interest rate controls, and the like. This element of the administration's strategy is easy to support, but the debtor nations, not the United States, must implement it.

The Second Element. The most controversial element of the U.S. strategy is the proposal to "provide (more) official financing" by increasing IMF quotas by $32 billion and increasing GAB by $12 billion by the end of 1983.[20] There are a number of reasons for questioning the proposal. The IMF does not need additional resources. The money will not be raised quickly enough to help and, in fact, events have already occurred that will solve the present crisis without further official financing. Also, more IMF aid could be counterproductive. Finally, viewed as insurance, the cost appears greater than the benefits.

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[20] [The "Domestic Housing and International Recovery and Financial Stability Act" (P.L. 98–181) was signed into law 30 November 1983. Section 802 of that act *increased* the U.S. quota to the Fund by 5.31 billion SDRs, approximately $5.5 billion (from 12.6 to 17.9 billion SDRs). In his April 1983 monograph, Weintraub opposed the quota increase, but argued that if the increase took effect, "it would be wise, to tie the expansion of IMF and GAB resources to decreasing members' borrowing powers.

The IMF already has substantial unused financial resources and the power to create and raise additional billions of dollars. It has $8 billion immediately available in the form of on-hand lending resources. It also has a large free or unpledged gold stock, the power to create new Special Drawing Rights (SDRs), and certain borrowing powers. Some would argue, however, that apart from the $8 billion on hand, the IMF's existing financial resources are more apparent than real.

First, the IMF's Board of Governors must approve any sale of its gold or its pledge to member nations for use as collateral, allowing them to borrow on the open market with favorable terms. The board would also have to approve any new SDR issue and allocation. These are major policy decisions, and there is no ordinary authority or historical precedent for such actions. In both cases, therefore, approval could be difficult to obtain. If the United States opposed such solutions, as it has in the past, no approval would be given, since an 85 percent affirmative vote is required and the United States holds more than 15 percent of the votes.

Second, it must be recognized that newly created SDRs would not be assigned to the IMF itself, but would be allocated directly to member nations by the existing formula. Thus, it would take a huge increase in SDRs to provide troubled Eastern bloc nations and LDCs with even moderate amounts of new, hard currency. In addition, since a country can use its SDR allocation as it sees fit, the IMF could not impose conditions that would constrain a nation from pursuing inflationary policies.

Third, although the IMF can now borrow from member or nonmember nations on a case-by-case basis—from Saudi Arabia, for example, or other nations with large liquid assets—and can do so by a routine vote of the Board of Governors, the sources of such borrowing are dwindling.

Although it would be difficult for the IMF to use its gold stock, create new SDRs, or obtain additional resources by borrowing, and although there are restrictions on how it can allocate newly created SDRs and limits on the leverage it would get from such allocations,

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Currently, members can borrow 4.5 to 8 times their IMF quotas. These multipliers should be cut drastically" (p. 50).]

the IMF does have substantial unused financial resources and the potential for creating more. It holds approximately 100 million ounces of gold worth $40 to $50 billion (at current prices), plus $8 billion in cash. It also has virtually unlimited power to create new SDRs and it has certain borrowing powers. The combination of these assets and powers provides a formidable package of "last resort" financial resources and powers.

Even if [the] IMF had no unused resources, increasing IMF quotas and expanding GAB would not help and is not necessary. Events already have occurred that will defuse the current crisis before the new funds are scheduled to be paid into the IMF and GAB, which is not until the end of 1983. Debtor nations that could not service their debts in 1982 have taken steps to reduce their external deficits. Most important, exchange rates have been adjusted in many countries, including Mexico and Brazil. Creditors have eased the liquidity crunch, maturing loans have been rescheduled, and the IMF and commercial banks have granted additional loans. Finally, interest rates have fallen, and a strong economic recovery seems to be under way in the United States and other developed nations. New policies and economic trends will make it far easier for debtor nations to service their debts in 1983 than in 1982.

There is no need to increase IMF quotas or expand GAB now. In fact, it could be counterproductive to do so. Knowing that the IMF and GAB have acquired $44 billion in additional financial resources, debtor nations could avoid or renege on the "determined action" that must be pursued if they are to ever manage their external debts. Private lenders could be drawn into extending new credits with little chance of repayment. The problem would be put off, not solved, and would grow over time.

Analysis of near-term capabilities, problems, and trends does not support the administration's call for "strengthening IMF resources." There remains the question of whether the insurance that the U.S. contribution would buy is worth the $8.4 billion cost. The benefits depend on the loss that is insured against, an unknown figure. My best estimate of the maximum loss (in current value) is $30 billion.

Although anything is possible, the worst-case scenarios that have been presented in response to the current debt crisis, involving the collapse of the U.S. banking system and the virtual cessation of international trade, are too unlikely to be worth insuring against. If they were real dangers, the case for "strengthening IMF resources" would be strong, but they are not. Nor is there a case for protecting against a redistribution of market shares in banking, even though that would involve some painful local adjustments. The $8.4 billion

[in] proposed U.S. contributions must be viewed as insurance against a partial reduction of exports and a resulting decrease in real GNP in the event of LDC defaults. Considering all the factors that would affect international finance and trade and U.S. exports as a result of major widespread defaults, it is estimated that U.S. real GNP would be decreased by no more than 1.5 percent, or $45 billion (in current value). The Council of Economic Advisers estimates that U.S. real GNP is likely to be decreased by 0.5 percent, or $15 billion, as LDCs reduce their imports under the administration's strategy. (Part of this reduction has already occurred.) Thus, the proposed $8.4 billion in U.S. contributions would insure against a maximum loss of real GNP of $30 billion. Ordinarily, the potential loss in purchasing insurance against an event with a significant chance of occurring is a much greater multiple of the premium than is the case here.

The Third Element. Viewed alone, continued bank lending to debtor nations is not controversial. Banks will "provide enough continuing credit" if it is in their best interest to do so. The question is whether governmental policy should promote this action. There are indications that the U.S. government has encouraged bank lending to LDCs in the past, and the proposal to increase IMF quotas and expand GAB is designed in part to make it easier for banks to continue lending to developing nations, especially those that are financially strained. Doubtless banks would feel more secure lending to LDCs if their governments see the IMF as an elastic conduit for helping debtor nations. Under certain circumstances, however, continued lending could lead to a magnification of the same imprudent lending practices that helped create the present debt crisis. Governmental policy to promote bank lending to debtor nations is not desirable.

The Fourth Element. The fourth element of the U.S. strategy calls for "governments and central banks in lending countries to act quickly to respond to debt emergencies when they occur." Governments and central banks already have ample powers to do so, and the administration is not asking for anything new. This part of the strategy is not controversial.

The Fifth Element. The final element of the U.S. strategy calls for free world industrialized nations to expand their economies. No one can effectively argue against this, provided that policies adopted do not lead to another inflationary surge in the industrialized free world. If inflation is reaccelerated, recession will eventually follow. As stated by the IMF's Interim Committee of the Board of Governors in its 10 February 1983 Paris communiqué, "successful handling of the inflation problem is a necessary—albeit not sufficient—condition for sustained growth." The communiqué "urged national authorities, in their efforts to promote sustained recovery, to avoid measures that might generate harmful expectations with regard to inflation." Unfortunately, it is not clear that inflationary measures will be avoided.

Summary. The U.S. strategy for solving the debt problem is debatable and risky. First, the proposed increases in IMF quotas and GAB are not necessary at this time. The legislative debate on the proposal to increase IMF quotas and expand GAB should be delayed until next year. Events are defusing the debt bomb, and it is wiser to discuss the proposal in a noncrisis atmosphere.

Second, although continued bank lending per se is not controversial, promoting such lending involves risks. Banks should be allowed to determine what is in their own best interests, with the understanding that they alone bear the risks. If it can be shown that the national interest is involved, national resources should be put at risk. No such interest has yet been demonstrated.

Third, although economic recovery and sustained growth are critically important, it is essential to avoid inflationary policies in pursuing recovery and growth. Specific policies for achieving recovery and sustaining growth without reaccelerating inflation have not yet been delineated. That deficiency should be corrected promptly.

Asset Exchange Proposals

There is considerable sentiment for making banks "pay" for Congressional approval of increased IMF quotas and expanded GAB and then giving the payment to debtor nations so they can live with their debts more easily. One plan would require banks to discount foreign loans in exchange for securities issued by a U.S. government or international agency. The buying agency would reschedule the loans on terms more favorable to debtor nations. For example, banks might be required to discount their foreign loans to the Federal Reserve at prices well below par, and the Federal Reserve would reschedule them at interest rates well below market rates and with stretched-out repayments.

There are at least four problems with this approach. First, the external debt problems of Eastern bloc nations and LDCs are country specific, so it makes no sense to treat the loans as equally risky. Some foreign loans even to non-OPEC developing countries, are in little danger of default or being repudiated. Thus, under the asset exchange proposal, the purchasing agency (for example, the Federal Reserve) would have to decide which loans banks were required to discount.

Given such power, the agency would be in a position to discriminate among countries and banks. It would be unwise to give such discretion to any agency, national or international.

Second, it should be remembered that medium- and long-term loans made by U.S. banks constitute only about 20 percent of the total medium- and long-term indebtedness of non-OPEC developing countries. It would be neither fair nor sensible to force U.S. banks to discount their loans to these countries if other creditors remained unaffected. Further, there is no way that the United States could require creditors (other than U.S. government agencies) to discount their loans to these countries.

Third, if banks are forced to discount loans which they have made to specific countries, to the Federal Reserve or some other national or international agency, they would be unlikely to issue new loans to these countries. Thus, asset exchange plans would make it more difficult to give financially strained countries "enough continuing credit to maintain continuity of payments and a financial environment in which orderly adjustment programs can be implemented." In short, rather than helping debtor nations, compulsory asset-exchange plans could force them into default.

Fourth, asset exchanges at discounts would necessitate reducing the capital of participating banks simultaneously by amounts equal to the discounts from par at which the loans are sold to the Federal Reserve or other agency. At the same time, the gain realized by debtor nations in reduced debt service payments from loan reschedulings would extend only over a period of years. For these schemes to significantly help financially strained debtor countries, they would have to create serious capital problems for some banks.

Some proposals urge that voluntary asset exchanges be negotiated between debtor nations and their U.S. banks, perhaps with assistance of the Federal Reserve or some other U.S. agency. Debtors would offer their banks new loan agreements in exchange for existing ones. For example, new agreements might give the banks claims on debtors' exports in return for lower interest rates and stretched-out repayment schedules. There is no reason why banks and debtors should not negotiate such exchanges, but there also is no reason why public policy should encourage such negotiation.

The Challenge: Avoiding Doing More Harm Than Good

The current debt crisis can be solved, but the policies adopted to solve it could cause more long-term harm than near-term good. Such policies must be avoided in designing a package of remedies [The following package is proposed to effectively deal with the present debt crisis. It consists of four elements.]

1. Resumption of Economic Growth by the United States and Other Developed Countries. The present debt crisis is unlikely to be ameliorated until the economies of the United States and other developed countries recover substantially the production and consumption lost in the 1981 to 1982 recession and provide evidence of sustaining growth. Developing nations must have growing markets for their exports.

Developed countries must be careful, however, to prevent new inflationary surges from accompanying or closely following their recoveries and the corollary growth of developing nations' exports. The inflationary surges in the United States and other industrialized countries from the late 1970s to 1981 generated an economic environment in which developing nations flourished but in which the seeds of the debt crisis were sown. Developing nations' output and exports increased, but so did their indebtedness. Ultimately, inflation in the United States and other industrialized countries produced high interest rates and set the stage for the 1981 to 1982 recession. These events were important causes of the present international debt crisis.

New inflationary surges in developed countries must be avoided if we are to ensure both sustained growth and a permanent resolution of the international debt crisis. Specifically, achieving real economic growth without inflation requires constraining but not contracting monetary growth, especially in the United States. One does not have to be a monetarist to understand Chairman Volcker's statement before the Joint Economic Committee (*Federal Reserve Bulletin,* February 1980) that "the inflationary process is ultimately related to excessive growth in money and credit. This relationship is a complex one, and there are many facets of it that are sensitive to nonmonetary economic variables. But, in spite of all the nuances, it is clear that inflation cannot persist over the long run in the absence of excessive monetary growth."

Based on the history of the post–World War II period, 0 to 2 percent per year M1 growth is large enough over the long term to sustain normal real growth, but not so large as to produce inflation. Currently, M1 growth is well above 2 percent a year. Quickly reducing growth to the 0 to 2 percent range would abort the present recovery of the U.S. economy. However, there is no need to increase money growth at this time; it is fast enough and recovery is under way. The policy should be to steadily reduce M1 growth to the 0 to 2 percent range over four or five years and keep it there.

2. *Improvements in the Trade and Current Account Balances of Debtor Nations.* Debtor nations must take "determined action" to increase their exports and the investment of foreigners in their plant and equipment, decrease their imports, and constrain their consumption. Most important, debtor nations must allow their exchange rates to float downward or devalue them realistically, as Mexico and Brazil have recently done, and enforce the new rates by reducing their fiscal deficits and moderating money growth.

Downward exchange rate adjustments will increase the exports of debtor nations and decrease their imports, thereby improving both their trade and current account balances. In addition, debtor nations that allow their exchange rates to adjust downward will become, relatively speaking, low-cost producers. In time, this will attract investment capital, making it easier for debtor nations to finance current account deficits and, over a period of years, spurring their GNP growth rates. Low domestic tax rates on saving and investment income, removal of all capital controls, and noninflationary money supply growth would also encourage investment and growth and improve their external accounts. It is a mistake to view so-called austerity programs as recessionary or anti-growth. They are, rather, pro-saving, pro-investment, and pro-growth.

Finally, the United States and other developed countries should do nothing to impede debtor nations in their pursuit of increased exports and investment. This means that the United States and other free world developed countries must avoid protectionist measures, equalization taxes, and capital controls.

3. *Willingness of Bank Creditors to Reschedule Maturing Loans and Extend Additional Credits.* Debtor nations need time to implement realistic adjustment programs. Their bankers must be willing to give it to them, and where prudent, to provide new credits. However, banks cannot and should not be pushed or tempted to reschedule and extend new credits. They must do it on their own initiative, in meeting their own needs, and at their own risks. It will be in their best interests, if debtor nations in danger of defaulting take "determined action" to improve their trade and current account balances.

4. *Willingness of Governments, Central Banks, and the BIS to Provide Short-Term Credits in Debt Emergencies While Loan Reschedulings Are Being Negotiated.* Providing short-term credits is a proper crisis role for governments, central banks, and international agencies, since loan reschedulings necessarily take time to negotiate.

These four elements comprise a solution package that will defuse the present international debt crisis without doing more harm than good. The challenge is to limit our initiatives to this package. As is often the case in economics, activist policies to solve crises are unnecessary and could be counterproductive.

THE INTERNATIONAL DEBT PROBLEM

Allan H. Meltzer

Several points should be made when considering the current international debt problem. First, I discuss the role of oil shocks, the most common explanation of the problem, and argue that the oil shocks do not explain why some countries are unable to make the interest and principal payments on their international debt. Second, I look at a more credible explanation of the problem, the policies chosen by particular debtor countries, and discuss some consequences of those policies. Next, I consider the proper method of evaluating a debtor's financial position. Finally, I briefly discuss some alternative solutions.

Causes of the Debt Problem

Late in 1982, shortly after the debt problem was widely recognized, a group known as the Ad Hoc Committee on International Debt discussed the origins of the debt problem and some proposed solutions.[1] The Ad Hoc Committee noted that changes in the relative price of oil cannot explain the financial distress that developed in several countries at about the same time. The countries in distress included oil exporters like Mexico, Nigeria and Venezuela, oil importers like Brazil, and countries that neither export nor import oil on balance, like Argentina. Further, one finds many countries that import a large fraction of their oil imports but do not suffer financial distress.

There is simply no relation between a country's trade balance in oil or energy and its current financial position. Oil importers like

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[1] The committee members are Karl Brunner, Michele Fratianni, Morris Goldman, Jerry L. Jordan, Allan H. Meltzer, and Anna J. Schwartz. For their summary statement, see Ad Hoc Committee on International Debt (1983).

Japan, Korea, Malaysia, and Singapore remain capable of paying their obligations as they come due. Nigeria is in distress; Venezuela is on the brink of distress, and Indonesia's position is far more uncertain than some of the neighboring Asian countries mentioned above.

In three of the principal debtor countries—Brazil, Mexico, and Argentina—we can find a direct relation between public policy and financial distress. In these countries and others, investment and the allocation of resources has been controlled by the government, operating to a greater or lesser degree under the rules or procedures suggested by the Economic Commission for Latin America (ECLA). That Commission advises countries to sacrifice efficiency by placing main responsibility for the allocation of resources with the government rather than the market. And, ECLA urges governments to substitute domestic production for imports even if domestic production is more costly. This policy, known as import substitution, contributes to inefficiency.

There are, then, two main causes of inefficiency. One is the public allocation of resources exemplified by the building of Brasilia in an earlier period and more recently by the building of the Itaipu Dam between Paraguay and Brazil or the building of roads across the Amazon. One need only visit Argentina or Mexico briefly to find evidence of excessive employment and inefficiency in the public sector. Argentina taxes exports from the most productive sector, agriculture, to help support the bureaucracy. This makes the debt problem worse by reducing exports. In these countries and others, credit is allocated selectively and some types of borrowing are subsidized, further reducing efficiency.

These policies helped to build an industrial base, but they do not assure the efficiency of that base. When world growth slowed, or stopped, the countries that followed the advice from groups like ECLA did not respond or adjust. They continued to borrow in the world market, increased domestic money growth and aggregate demand, and offered "government guaranteed" loans to foreign banks. These guarantees encouraged foreigners to increase loans by 30 to 40 percent in a short period and brought on the present period of financial distress.

Distress is not uniform. Other countries continued to grow throughout this period. The famous gang of four in Asia did not follow ECLA's policies—they did not base the allocation of resources on political decisions of the government, but relied more on markets. As a result, these countries experienced much less difficulty when the world conditions changed from rising inflation to disinflation.

The International Monetary Fund has taken an incorrect reading of the debt problems of Latin American countries and has implemented a program based on this incorrect view. There may be some good results of the Fund's program of conditional lending when it is applied to one country at a time, but the program makes no sense when it is applied multilaterally to countries which trade extensively with each other. The conditional IMF loans require Mexico, Brazil, and Argentina to take steps that reduce imports and increase exports. But, Mexico, Argentina, and Brazil cannot increase their exports to each other while reducing their imports from each other. Standard conditional-lending policy seems to be inapplicable in the present circumstances.

Government guarantees of international borrowing by domestic firms encourage firms to borrow. The government's guarantee lowers the risk perceived by lenders, for a time at least. Borrowers pay a smaller risk premium because lenders believe that the governments will shift any losses from them to the domestic taxpayers.

In an excellent recent paper, Roland Vaubel (1983), building on an earlier discussion by Wilson Schmidt, looked at the effect of IMF lending on debtor countries. He concluded that all loans to developing countries are subsidized. Sometimes the subsidy is open; sometimes it is hidden. Either way the subsidy encourages borrowing, reduces a country's incentive to remain solvent, and increases the risk of insolvency or default when market conditions change, as they did in the early 1980s. Vaubel noted that reducing the incentive to remain solvent is a type of moral hazard.

A government's guarantee of foreign loans and debt is valuable only if the government's policies permit the central bank or the borrowers to accumulate foreign exchange. Policies that encourage inefficiency or capital flight, as in Argentina, debase the guarantee. By subsidizing loans, the IMF encouraged excessive borrowing and the risk of default or insolvency. Further, through its policy of conditional lending, the IMF encouraged lenders to believe that there would be no defaults.

Many people who discuss the moral hazard in international lending take a very different starting point. They see the problem as a failure by lenders to limit each country's debt to the amount that the country can service. They conclude that more loans, with larger subsidies, are required now to make up for the lenders' past errors.

Vaubel's argument shows that the mistake was to allow the development of international institutions that hindered the operation of the market. Many loans, we see with hindsight, were based on overvaluation of government guarantees. Lenders attached greater value to the commitment of governments to maintain policies that would honor their guarantees than some governments proved willing or able to provide. When inflation slowed in the developed countries and recession spread, borrowers could no longer act as if there would be continuing inflation and continuing growth of the world economy. Some adjusted, but others continued to borrow and to follow inflationary policies. Many of the latter now experience financial distress.

Evaluating the Debtors' Prospects

Lenders often use the ratio of debt to GNP or to exports or the ratio of interest payments to net exports to assess the position of debtor countries. These ratios are not very informative. Korea has had the same ratio of debt to GNP as Argentina in recent years though the prospects and positions of the two countries are very different. A main problem is that the ratios look *backward* while the market must look *forward* to evaluate a country's ability to earn enough foreign exchange to service its debt.

The proper way to evaluate debt is to compare the real rate of interest to the applicable rate of growth of output. Countries that encourage efficiency and productivity have higher growth rates, so at the same world real rate of interest they can service more debt if they choose to do so.

Countries that continue to use resources efficiently benefit in two other ways. Typically, the market evaluates the loan as less risky, so lenders charge lower rates of interest on the less risky loans. Also, efficient resource allocation enables a country to compete effectively in export markets and thus earn the foreign exchange to service the debt. Efficient use of resources often permits exports to grow for a time at a faster rate than domestic consumption or total output.

We can approximate the difference between the real rate of interest and the real rate of growth for a developing country by comparing the current growth rate (expressed in U.S. dollars) to the current market rate of interest on dollar loans. (Both numbers include an estimate of the actual or anticipated rate of inflation in the United States.) The comparison shows that if the current rate of interest on these loans is in the neighborhood of 14 to 15 percent, then nominal GNP growth in those countries, evaluated in dollars, must average at least 14 percent. In real terms, growth must be about 8 to 9 percent on average. If not, each year the debtor will have to increase debt to pay interest on the outstanding debt. The debt will grow without limit. This is not feasible.

No one should doubt that in the near term the debt in these countries will continue to increase. The reason is that servicing the existing debt requires interest payments on the order of $10 billion or more from the foreign exchange earnings of some countries. Further, these countries were developing and, if development resumes, they will import capital. But currently they must invest to achieve average growth of 9 percent just to pay the interest on the old debt. If you believe that Mexico, Brazil, and Argentina can grow in real terms at 9 percent for the rest of the decade, the problem is transitory. If you believe that maintained real rates of growth of 8 to 9 percent per year in Mexico, Brazil, and Argentina are not likely, then you recognize that there is a persistent problem. The interest payments on outstanding debt are going to rise because these countries will not experience growth of their exports at a rate sufficient to earn the foreign exchange needed to service their outstanding debt.

Proposed Solutions

In the latter case, where real growth rates fall below 8 to 9 percent per annum, there are three types of solutions. One is to muddle along from one period of financial distress to the next, as we have been doing for the past several years, and as we will continue to do under the current set of national and international policies. That way preserves uncertainty and promotes distress by continuing episodic rescheduling and by deferring a solution to the longer-term problems of these economies.

The second way, the way which seems most probable given the proclivities of the international organizations, is to move further toward a system of forced lending. Instead of periodic financial distress and periods of international, financial tension, debtor governments will offer to pay a share of their export earnings to service outstanding debt. Any remaining debt service will be added to the debt. Creditors will lend, through forced loans, the amount of additional foreign exchange required or demanded by debtors under policies chosen by the debtors. One sees the beginning of this system in the recent negotiations with Poland, and also in some demands that Argentina has made.

The third, and I believe the most appropriate solution, starts by recognizing that mistakes have been made in the past. These mistakes were not due to market failure. Countries pursued inefficient policies, but lenders believed that governments would be able to honor their guarantees. Whatever the cause, the problem remains. I believe that any long-term solution must begin by revaluing the debt at market prices. We know something about what this implies because there are Mexican bonds outstanding. These bonds are traded in London and pay interest to maturity of about 16 percent per annum. The bonds sell in the range of 70 to 80. This suggests the proportion in which the real value of the debt lies below the face value. I propose that the banks act as if the loan is a marketable bond that has fallen 20 to 30 percent in value. The banks should offer to write down the value of the debts in market value and write off the losses. In exchange, they should require governments to exchange a portion of the remaining debt for marketable equity claims to the real assets in government corporations.

This proposal takes the guarantee seriously by asking governments to convert part of the debt that is now outstanding into equity claims against public sector corporations and to allow the creditors to sell their equity to third parties. The proposal treats the debt of these sovereign governments as if it were commercial debt in an illiquid enterprise. Converting a debt claim by the banks into an equity claim uses the traditional banking procedure to reduce the volume of outstanding debt.

This proposal lowers the interest burden on the debtor countries in two ways. First, the outstanding debt is written down to its market value, as the market would have done if the debt took the form of bonds instead of loans. Second, converting part of the debt into equity reduces current debt service. Together, these steps lower the interest burden and the real rate of growth required to service the debt. The debt burden becomes manageable. The losses are shared by the debtors and creditors. The debt shrinks, but the debtors receive a better guarantee.

Conclusion

Having traced the debt problem from its causes to some proposed solutions, we can conclude by noting that there is as yet no reason to believe that this period of financial distress must end in a crisis or a breakdown of the financial system. To reduce the risk of a crisis, however, we must change policies. The system of forced lending and IMF conditionality seems counterproductive. It perpetuates and extends both the debt and the problem. It is time to replace that system with one that treats these debts as we would the debts of any private borrower who is unable to meet his obligation on time.

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WORLD DEBT AND MONETARY ORDER: LEARNING FROM THE PAST

James B. Burnham

> *It must not be forgotten that if there was bad borrowing . . . there was also bad lending. As a result of reckless competition, encouragement was sometimes given to borrowers and lenders alike without sufficient understanding of what was involved; loans were often made for unproductive purposes; sufficient care was not always exercised to see that a loan was used for the purpose for which it was granted; and high interest rates, instead of encouraging investors to inquire into the likelihood that the borrower could meet his obligations, failed to do anything but encourage them to invest their money. It is important that there should be in the future a greater sense of responsibility both in borrowing and lending than has frequently been the case in the past.*
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> World Bank, *Second Annual Report* (1946–47), pp. 14–15

As the above quotation suggests, the perceived nature of the current international financial situation, and some of the lessons being drawn from it, are eerily similar to what existed in the late 1940s, following the worldwide wave of defaults on foreign borrowings in the 1930s.

It is easy to overemphasize the similarities between the international debt situation arising out of the Great Depression and that which had its origin in the inflationary 1970s.[1] But I do think it is important to recognize that there are important common characteristics in the origins of these two periods of international financial

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[1] Roland Vaubel (1984) deals with the all-important question of monetary policy and the banking system during these two periods.

stress, that the geographic location of the initial manifestation of crisis was roughly the same (Austria in 1931; Hungary in 1982), that the problems caused by a heavy burden of debt in an unexpectedly noninflationary world are quite similar, and that some of the techniques used to ease these problems are nearly identical.

However, the real story is how the debt crisis of the 1980s has been contained and how the "debt-deflation-depression" spiral of the 1930s has been averted without the adoption of explosively inflationary policies. That is a subject I will return to shortly.

Origins of the Current Situation

Let me start with a highly condensed summary of the origins of the current international debt situation. In the 1970s, responding to a variety of economic, political, and social pressures, major governments around the world—including the United States—countenanced or encouraged excessively rapid acceleration in their national money supplies. The path of least resistance to a variety of adjustment problems, of which OPEC oil price increases were only the most visible, was seen to be in more rapid growth of the money supply and the resulting inflation. Simply put, if one is to have stable prices on average, for every price that goes up, some other price has to go down. And most people who are producing and selling are not terribly keen on falling prices for their own products or services. In the final analysis, inflation is the monetary expression of a political process, as Henri Aujac recognized many years ago.[2]

The tendency to point the finger at OPEC and oil price rises as the source of the inflationary upsurge of the 1970s, and the associated recycling of "petrodollars" and buildup of LDC debt is understandable. But it ignores a crucial link in what actually happened. It was necessary for the major central banks, above all that of the United States, to *ratify* the potential inflationary pressures which were being set in motion by higher oil prices. The OPEC oil price increases were neither a necessary nor sufficient condition for the inflation and debt buildup of the 1970s.

Thus, as a result of the interaction of politics and monetary policy, price increases in the 1970s accelerated with occasional periods of weakness corresponding to business recessions. An inevitable corollary of this process was an equally rapid expansion in credit of all forms, but most obviously bank credit. Indeed, the price of credit (interest rates) increased less than the average price level, resulting in negative real interest rates—and, not surprisingly, further stimulating the demand for borrowing.

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[2] Aujac (1954).

In this kind of environment, with expectations of double-digit inflation becoming more and more deeply embedded, those who failed to increase their borrowing, wherever they hailed from, were considered to be the slow learners. Those who made the front covers of *Farm Journal, Fortune*, or *Euromoney* were the big borrowers, each in his own league, with debt coverage ratios that would have made a 1960s financial adviser or analyst cringe.

What of the role of the commerical banks in this process? To what extent are they responsible for the situation which they (and their borrowers) find themselves? I view them more as passive actors than as conscious agents recklessly putting at risk shareholder equity or their depositors' funds. The necessary corollary to excessively rapid expansion of the money supply was excessively rapid extension of bank (and other) credit. With a banking system based on fractional legal reserves, and an underlying entrepreneurial spirit on the part of financial market operators, it was inevitable that excessively rapid creation of bank reserves would lead to a corresponding increase in lending activity, at home as well as abroad. The resulting acceleration in inflationary pressures altered expectations of future cash flows and views about appropriate debt/equity ratios and the structure of any given level of indebtedness. Indeed, when all the returns are in, I suspect we will find far more bank losses arising out of overly optimistic domestic energy lending than from loans to developing countries.

The criticism that commerical bankers are receiving today, as a group, overlooks the fact that they were responding as financial intermediaries are supposed to in an expansionary monetary policy environment. Many of the charges being made today are no more than echoes of the extensive Congressional hearings in the early 1930s, which delved into the role of the investment bankers and their flotation of developing country bonds on the U.S. market.

Although the opening stages of the 1982/83 crisis contain some fascinating parallels with the 1930s, the middle and later stages are clearly moving in a different direction. Two developments have played key roles in this change in script. First, in contrast to the actual contraction in money supplies that occurred in the 1930s, money growth rates in the major industrial countries have bottomed out and have increased moderately in recent months.

The acceleration in money growth has been accompanied by a recovery in nominal and real income growth rates in the major industrial countries, most dramatically in the United States. This development has major favorable implications for many countries. For example, largely as a result of our strong recovery, U.S. demand for imports has surged dramatically, with imports from the non-oil developing countries for the first 11 months of 1983 running 14 percent ahead of a year earlier.

The second key factor is the rapid development of an effective network of cooperation between the recently strengthened International Monetary Fund, the Bank for International Settlements, the major international commercial banks, and the various central banks and finance ministries of the major industrial nations. Although each country that has experienced difficulty in meeting its international obligations has been treated differently, given the varying circumstances, a rough pattern of adjustment has emerged. A fair characterization of this process is "ad hoc but not disorderly."

This network of cooperation is activated by a rapid rundown in the official reserves of a developing country (frequently precipitated by a withdrawal of foreign commercial bank short-term credit lines). The reserve rundown is first met by short-term official financing in a variety of forms from major central banks and finance ministries or, occasionally, the BIS. The borrowing country declares a short moratorium on repayments of principal, negotiates a rescheduling of official long-term credits through the Paris Club mechanism, enters into an adjustment program with the IMF, negotiates a rescheduling of medium-term commercial bank credits, and then frequently arranges for additional new commercial bank financing and official export credits. In the United States, considerable cooperation from the banking regulatory authorities is an integral part of the process. During this process the initial lenders are frequently "taken out" by subsequent lenders, so that the gross amount of new credit extended will substantially exceed the final net figure.

The objective of the process (although it is seldom characterized as such) is to avoid what has been called a "credit implosion," and to abort an incipient downward debt-deflation-depression spiral. In such a process, the running-off or calling of loans by commercial banks results in the destruction of privately created money that may not be offset by central bank creation of high-powered money. This process is associated with downward pressure on prices (as assets are liquidated to raise the cash necessary to service loans) and an ever-increasing real burden of debt. Such was the result of the unchecked debt-deflation spiral of the 1930s.

In the current period, however, as a result of the stabilization and modest recovery in money growth rates, accompanied by a flexible and informal network of cooperation among all major financial players, and strong, effective policy adjustments in many of the affected countries, the debt-deflation spiral has been aborted. This has been achieved without the adoption of consciously "reflationary" policies. The result is that a worldwide adjustment process is under way which promises healthy, sustainable growth with minimal inflation.

Following the rule that "no news is good news," as a result of developments over the past 12 months, there has been a generally unnoticed but marked improvement in the credit standing, reserves, and balance of payments position of some of the key Eastern European countries which were the first casualties of the winding down of inflationary pressures. There has been a remarkable turnaround in the Mexican situation and the adjustment process in Brazil, although difficult, shows considerable evidence of promising large, near-term gains, with a surplus on its balance of trade in 1984 likely to reach $9 billion, or more.

The Adjustment Process at Work

Even in the improving world economic situation a number of observers continue to question whether the threat of a generalized debt crisis has actually passed. They point to high real interest rates, relatively low prospective inflation rates (implying weak commodity prices and poor LDC export prospects), and the high levels of outstanding debt, equivalent to 143 percent of non-oil developing country exports at the end of 1982. With commerical banks apparently showing a lack of enthusiasm for international lending and export earning prospects supposedly bleak, pessimists do not see a way out of the current situation without major political problems or dramatic institutional initiatives.

This point of view overlooks two important trends apparent in recent debt negotiations and international trade. First, and most important, is the substantial amount of relief for borrowing countries that is arising from official and private reschedulings. William Cline has drawn attention to this phenomenon in the case of four major debtors who have recently rescheduled their obligations, Argentina, Brazil, Mexico, and Yugoslavia. His data suggest that no less than $30 billion in scheduled amortizations or of public and private debt repayments was affected by agreements reached in late 1982 or early 1983.[3] Missing from his list are prospective arrangements for a number of other large debtors, such as Nigeria, Peru, Morocco, the Philippines, and Venezuela. Cline (1983, p. 77) goes on to construct an entirely plausible model which shows how rescheduling (or "forced lending") is a rational approach, and that,

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[3] Cline (1983). Computed from Table 8, p. 42.

> over the range of most relevant situations likely to arise—except in cases of relatively clear country insolvency—it will pay the banks to extend additional credit in order to secure the value of existing exposure.

Assisted by the spread of rescheduling agreements, the IMF's initial projection for total amortization payments in 1983 for the non-oil developing countries shows its first significant decline in over 20 years.[4]

Some of the techniques used to ease the burden of debt service in the 1930s look vaguely similar to those discussed today. When interest on foreign dollar bonds floated in the 1920s could not be paid in a convertible currency, it was occasionally paid in funding bonds or a "blocked currency." The first technique is comparable, in an economic sense, to some of the "new money" bank loans being arranged for certain countries, and the second has its counterpart in some Latin American arrangements, where local currency is paid into an escrow account for eventual conversion and full hard currency debt service.

The second development that is overlooked in today's environment is the favorable shift in terms of trade that is benefiting a growing number of developing countries. With prices of most nonmineral commodities up sharply over the past 12 months, the computed terms of trade for the non-oil developing countries are likely to show their first improvement since 1977. Formal index numbers, however, may understate the benefits for many countries. Scattered evidence from projects financed by the World Bank suggests that competitive pressures among suppliers and contractors on major infrastructure projects and energy development have resulted in sharply lower than anticipated prices. This implies that the squeeze on certain developing countries facing debt servicing difficulties may be somewhat less than generally assumed. Some commentators have suggested that sharply reduced import levels will result in drastic declines in production or investment. But estimates of the prospective real volume of imports may be too low if the price levels have been assumed to be too high.

However, I do not intend to be a Pollyanna about the current situation or the short-term outlook. A number of countries such as the Philippines and Nigeria continue to experience severe problems in servicing their debt, and the adjustment process will continue to be fitful, difficult, and frustrating. We will need to be on our guard not to relax the combination of speed, sensitivity, and international cooperation that has proven successful to date in dealing with individual countries' debt problems.

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[4] *IMF World Economic Outlook* (May 1983), Table 35, p. 204.

The Role of the World Bank

It is probably appropriate at this point to say a few words as to the role of the World Bank in this process. A number of commentators have suggested that the Bank take a more active role in assisting countries deal with their debt difficulties.

I am not very enthusiastic about such suggestions. The Bank's primary role and inherent comparative advantage is in long-term, project-oriented development lending. It is not designed to be, nor should it become, a central player in dealing with debt rescheduling problems or a global business cycle. There are a sufficient number of other national and multilateral institutions to deal with the situation. At the same time, the Bank can and has played a useful role in supplementing the efforts of other agencies in certain situations. Its macroeconomic policy advice and structural adjustment and other non-project loans have generally been carefully coordinated with the IMF. Supplementary loans or accelerated disbursement schedules have been adopted for countries where projects were in danger of falling behind schedule due to shortages of local funds and where the authorities are dealing with their difficulties in a positive fashion.

In planning for the future, it might be helpful to define the World Bank's basic objective with respect to those middle-income developing countries which are experiencing financing difficulties in terms of restoring their access to the private capital markets. The Articles of Agreement make it clear that the Bank's basic objective is to "supplement private investment," and to act generally as a catalyst, and not as a central player. Restoring access to the private capital markets means that the "B loan" co-financing program with commercial banks should be vigorously pursued. Restoring access also means greater stress in the operations of the Bank's affiliate, the International Finance Corporation, on bringing private companies back into the international syndicated loan market, as has been done recently for several companies in Mexico.

It is not helpful, however, to define the Bank's role in terms of its net transfer of financial resources to developing countries. The model of economic development which is implicit in such a concept is, in my view, irrelevant and misleading as to how the Bank can be most useful. Extensive calculations which purport to show some long-term aggregate "resource gap" for the developing countries as a whole, or for an individual country, involve heroic assumptions about saving, investment, productivity, international prices, and the role of government. It is far more preferable—even if considerably more modest—to see how the Bank's traditional strengths in project finance, economic analysis, and policy advice can be brought to bear on a country's development potential on a case-by-case basis. And in all cases the Bank's financial resources should be used only where they do not run the risk of displacing alternative sources of finance.

Looking to the Future

What are the implications of this necessarily sketchy tour of financial history and current developments? I think there are two basic conclusions that are supported by the evidence.

First, the concept of intense financial cycles, international in scope, is further supported by the developments of the late 1970s and early 1980s. This suggests that the preconditions for another buildup of excessive international debt are likely to emerge well before the end of this century. It is in the interests of analysts and policy makers to examine what steps might be considered now if such a buildup is not to threaten, once again, the world monetary order.

This leads to a second conclusion. The chief distinction between today's situation and that which existed as a result of foreign debt defaults of the 1930s is the central role of the commercial banks. The banking system's role in efficiently shifting funds on a worldwide basis (and I use "efficiently" here only in the sense of low transaction costs) was far superior to that of the investment banking community in the 1920s. But the cost of that gain in transaction efficiency was the financial system's increased fragility and susceptibility to financial crisis. The substitution of indirect securities (bank deposits) for primary securities (bonds) increased the operational efficiency of the system and tightened the links between financial institutions around the world; but it also increased the system's vulnerability to a systemic crisis by involving, indirectly, millions of bank depositors.

The issue then becomes, is the current "ad hoc but not disorderly" manner of coping with a potential crisis satisfactory? Judging by the results, I think we should be prepared to give it—and those individuals who have labored long and hard at making it work—high marks. But we might want to consider how their jobs could be made easier, and how the public's concern over "bailing out the commercial banks" with taxpayers' funds might be met in the future.

It seems to me that there are three criteria which should guide any such proposal. First, it should involve the commercial banks directly. Not because they are necessarily "responsible" for the problem of overindebtedness, but because they are inextricably part of the problem and thus they should be part of the solution. Second, proposals should ensure that the possibility of unleashing a flood of high-powered money or liquidity, with all the accompanying inflationary implications are reduced as close to zero as possible. Third, proposals should ensure that fair international burden-sharing is respected. It is not appropriate that the commercial banks or public authorities of any one country assume a disproportionate share of the effort to avert a worldwide banking or financial crisis.

In this context we might want to begin considering how the commercial banks themselves might fund, through a system of required interest-bearing reserve deposits, a facility that would provide at least the bridging loans that central bankers, the BIS, and others have been called upon to provide in recent months. Required reserves would be calculated as a percentage of exposure to the developing countries. Such a facility would reduce the potential inflationary pressures arising out of excessive short-term official finance in times of crisis and could also be designed to temper excessive enthusiasm for foreign lending at the most expansive phase of the next financial cycle. It need not be operated as an entirely separate institution, but could fit into either of the existing multinational, short-term-oriented financial organizations, the IMF or the BIS. I should emphasize that this idea is offered as a personal suggestion, and not in any official capacity.

Such an approach would appear to me to be worth examining, in a highly tentative manner, and recognizing that economists, like generals, have a habit of always fighting the last war. No doubt talented individuals will develop new techniques capable of extending credit throughout the world in the years ahead. But it does make sense to try and learn from the past so that the future may be a trifle easier for all of us.

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U.S. MACROECONOMIC POLICY AND THIRD WORLD DEBT

Michael Mussa

Introduction

Since 1981 the world financial system has faced continuing crisis due to doubts about the ability and willingness of debtor nations in Asia, Africa, Latin America, and Eastern Europe to meet the debt service obligations on their extensive loans from the international banking system. As demonstrated by the widespread opposition to the recent increase in IMF quotas, the commonly held view is that this crisis was created primarily by excessive borrowing by developing countries and excessive lending by financial institutions, especially large international banks. An analysis of the investment projects financed by external borrowing in many developing countries, and an analysis of the lending practices and policies of many financial institutions, would no doubt lend support to this commonly held view. However, since the current international debt crisis affects such a wide range of countries and such a wide range of institutions engaged in international lending, it is relevant to ask whether there is some common cause for this crisis beyond the errors and excesses of particular borrowers and lenders.[1]

In this article, I shall argue that the economic policies pursued by the United States during the past decade played an important role in the evolution and severity of the problems besetting debtor nations and their creditors. Specifically, I shall discuss six mechanisms through

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[1] In cases where problems with external indebtedness affect only a single country, such as Zaire in the mid-1970s, it is reasonable to focus attention on the specific difficulties of that country and its lenders. Such a narrow focus does not seem entirely justified in the current crisis that affects such a wide range of countries and lenders.

which policies of the U.S. government contributed to difficulties currently besetting the international financial system:

1. In the mid-1970s, U.S. policy encouraged borrowing by developing countries by facilitating the development of an international banking system that would recycle the surpluses of the OPEC countries.
2. Between 1975 and 1980, the monetary policy that contributed to a generally declining foreign exchange value of the U.S. dollar and to a generally low level of nominal and real interest rates encouraged borrowing by developing countries, especially borrowing denominated in U.S. dollars.
3. The energy policies of the United States between 1974 and 1980 that contributed to a higher world price of oil stimulated borrowing both by oil-importing developing countries, like Brazil, that sought to finance part of their increased oil import costs and by some oil exporters, like Mexico and Venezuela, that borrowed in anticipation of increasing oil revenues.
4. The shift to a tighter U.S. monetary policy after 1980 increased the debt service burden of debtor nations by contributing to increased real and nominal interest rates and to the appreciation of the U.S. dollar.
5. The worldwide recession that was partly the consequence of the tightening of U.S. monetary policy in 1981 adversely affected the export earnings of many debtor countries and thereby contributed to doubts about their credit worthiness.
6. The continuing large deficit of the government of the United States crowds out other borrowing, including that of developing countries, and contributes to higher interest costs on the existing debt of these countries.

The Nature of the Current Crisis

Before examining these mechanisms through which U.S. economic policies have contributed to the crisis confronting debtor nations and the international financial system, it is important to analyze the key ingredients of this crisis. The basic problem is that for many debtor countries, net foreign income[2] is less than the interest and principal due on foreign loans. Furthermore, sufficient doubt exists about the capacity or willingness of these countries to meet their future debt service payments since they cannot easily refinance the excess of their current debt service requirements over their net foreign income. The nature of this problem and the circumstances that contribute to its existence are well illustrated by considering the case of Brazil, the developing country with the largest external debt.[3]

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[2] Net foreign income is the current-account balance less net interest paid on foreign loans. It measures income available to pay the interest and principal on foreign loans.

At the end of 1983, Brazil's external debt was approximately $100 billion. Since much of this debt is floating-rate debt with an interest rate that is linked to LIBOR (the London Interbank Offered Rate), interest due in 1984 will be sensitive to actual behavior of interest rates. Assuming that LIBOR will average 10 percent, that Brazil pays a premium of 1.5 percent over LIBOR, and that all of Brazil's debt is floating rate, it follows that interest due in 1984 will be $11.5 billion. Some of Brazil's external debt is long term (15 years or more), but much of it has a maturity of 4 to 10 years. Assuming an average maturity of 8 years, it follows that principal payments due in 1984 should be about $12.5 billion, implying a total debt service requirement for 1984 of $24 billion. Brazil's net foreign income for 1984 will obviously depend on economic developments during the year, but it is reasonable to assume a figure between $2 billion and $6 billion, with $4 billion as a point estimate. Recognizing that all of these figures are rough approximations, it is clear that Brazil's net foreign income will pay only a small fraction of the interest and principal due on its external debt, leaving $18 to $22 billion of debt service to be refinanced presumably through rescheduling arrangements with Brazil's creditors and loans from the IMF. If mutually satisfactory rescheduling arrangements cannot be worked out between Brazil and its creditors, then Brazil would presumably go into default on its international loans and this would precipitate a major international financial crisis.

It is tempting to think that the basic problem with respect to Brazil's international debt situation is simply that its debt is too large. This is not entirely correct. It is surely true that if Brazil's external debt were much smaller, say $50 billion, its required debt service payments would also be much smaller, say about $12 billion rather than $24 billion. The debt service requirements would still exceed Brazil's net foreign income by $6 to $10 billion, but it would be easier for Brazil to refinance this smaller sum because it is smaller and also because Brazil's creditors would have greater confidence in its ultimate capacity to meet its debt service obligations.

This does not imply, however, that Brazil's debt exceeds a reasonable estimate of the debt that Brazil could afford to service in the long run. Since Brazil is a country with a good record of economic growth over the past 20 years and reasonable prospects for future growth, and since Brazil is probably a country that can profitably invest more in its development than can be financed out of domestic savings, it is conservative to estimate Brazil's dept capacity as the amount of debt on which it could afford to pay the annual real interest cost out of net foreign income. This is a very conservative criterion because if Brazil did pay the annual real interest on its external debt, then the real value of this debt would remain constant over time. With Brazil's real income expanding at 5 percent per year, well below the average growth rate of the past 20 years, the ratio of Brazil's external debt to its national income would be rapidly declining.[4]

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[3] All of the figures mentioned in this discussion are approximations used for illustrative purposes.

During the past 20 years, real interest rates on loans to countries regarded as good credit risks have ranged from minus 3 or 4 percent in the late 1970s to plus 6 or 7 percent in 1981 and 1982. As a long-run average, 4 percent per year is probably an upward biased estimate of the real interest rate that credit-worthy countries would have to pay on their external debts. It follows that for Brazil to meet the conservative criterion for credit-worthiness that it be able to pay the real interest on its external debt of $100 billion, Brazil would need to generate net foreign income of $4 billion, or about 2 percent of Brazil's national income. In my judgment, Brazil has the capacity to generate this amount of net foreign income in the longer run.[5] Hence, I conclude that the fundamental problem with respect to Brazil's external debt is not that the size of its debt is beyond a reasonable measure of the amount of debt it can afford to service. This same conclusion also holds for Mexico (the developing country with the second largest external debt) and for most other debtor countries. Only for a few smaller countries with very high ratios of external debt to national income is there a serious concern that the absolute size of their external debt exceeds a reasonable estimate of their debt capacity.

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[4] Between 1960 and 1970, Brazil enjoyed a growth rate of national product of 5.4 percent per year. Between 1970 and 1981, this growth rate rose to 8.4 percent per year. A 5 percent average real growth rate for the next two decades, therefore, does not seem unreasonable. Such growth would reduce the ratio of Brazil's external debt to its national product to about one-third its current level if there was no growth in the absolute size of Brazil's external debt.

[5] Among all developing countries, Brazil has had one of the better records of economic growth during the past two decades. It is well endowed with natural resources (except oil) and has an expanding population. Even in the present extremely distressed state of the Brazilian economy, the country will probably manage to generate net foreign income of about $4 billion. As the economy grows over time and as general economic conditions improve in the world economy, Brazil should be able to generate adequate net foreign income to service its debts.

The fundamental problem for most debtor countries is that their debt service, which must be paid to avoid default, frequently runs six or eight times the amount of the real interest payments that would keep the real value of their debt constant. Moreover, sufficient doubt exists about the ability and willingness of the governments of these debtor countries to meet their future debt service obligations. These countries cannot easily refinance the substantial fraction of current debt service that cannot be paid out of net foreign income.

Three factors contribute to the high ratio of debt service to debt outstanding. First, real interest rates charged on loans to developing countries have risen because of the general increase in real interest rates since 1980 and because fears of default have pushed up real interest rates for loans to developing countries. Second, the nominal interest rate charged on loans to developing countries, like all nominal interest rates, includes both the real interest rate on these loans and an inflation premium to compensate for the expected increase in the price level. During the past three years, the inflation premium on U.S. dollar-denominated loans has probably added between 4 and 12 percent to nominal interest rates. During the late 1970s, when real interest rates were generally negative, the inflation premium accounted for more than all of nominal interest charges. Third, since loans to developing countries tend to be of intermediate duration (8 to 12 years), principal repayments frequently run between 8 and 12 percent of outstanding loans. Altogether, debt service on loans to developing countries during the past three years has generally run between 15 and 25 percent of outstanding loans. This amount of debt service is very much greater than the 4 percent real interest that would keep (on average in the long run) the real value of the external debt from expanding.

Three factors have also contributed to increased doubts about the ability and willingness of the governments of debtor countries to meet their debt service obligations, in addition to the growth of these obligations. First, because of the world recession and the declines in the prices of many of the exports of the debtor countries (in terms of the currency of denomination of their external debt), export earnings of many debtor countries have declined and this has diminished the actual and perceived capacity of these countries to service their external debts out of their net foreign incomes. Second, because many debtor countries have experienced severe economic difficulties since 1980, governments in these countries are understandably reluctant to pursue more restrictive domestic policies that would contribute to their capacities to meet their external obligations but at the expense of further declines in domestic output and employment.

Third, when doubt arises about the ability or willingness of a country to meet its debt service obligations in the longer term, potential lenders are reluctant to extend new credit and existing lenders are anxious to receive payment of all interest and principal. Even a creditor who has a favorable assessment of a country's ultimate capacity to service its debt may be very reluctant to make new loans or roll over existing loans because that creditor fears that a default may be forced by other creditors who do not share that favorable assessment. This might create a panic situation in which doubts about creditworthiness and fears of default become self-justifying. In fact, in negotiations of rescheduling arrangements, it is frequently the case that large banks which recognize the impossibility of collecting all of the interest and principal due on loans to a debtor country will not reschedule these payments unless similar banks agree to accept their "fair share" of rescheduling.

In summary, the fundamental source of the current crisis in the international financial system is not simply that the debts of most developing countries are too large relative to a reasonable estimate of their long-run debt service capacities. Rather, the problem is that annual debt service requirements have grown very large due both to the growth of outstanding debt and the high ratio of debt service to outstanding debt. This growth of debt service requirements has occurred at a time when low export earnings have reduced current debt service capacities and when severe economic difficulties have raised serious doubts about the ability and willingness of the governments of debtor countries to meet their external debt obligations. In this environment of doubt, creditors have become reluctant to extend new loans or roll over existing loans, thereby contributing to the possibility and fear of default even by a country that might have the long-run capacity to meet its debt service obligations.

The Origins of the Crisis in the 1970s

Having examined the nature of the difficulties currently besetting the international financial system, it is appropriate to turn attention to the role of U.S. economic policy in creating these difficulties. The seeds of the current crisis were sown in the middle and late 1970s. As shown in Table 1, if we go back before this period to 1970, we find that ratios of external debt to national income and of debt service to export earnings for middle-income developing countries were typically lower than in 1981, when the debt problems of these countries

TABLE 1

THE EXTERNAL DEBT AND DEBT SERVICE RATIOS OF DEVELOPING COUNTRIES

	External Debt as a Percentage of GNP		Debt Service as a Percentage of Export Earnings	
	1970	1981	1970	1981
Low Income Countries	17.5	18.6	12.0	8.8
Middle-Income Oil Importing Countries	13.4	19.1	9.3	13.9
Middle-Income Oil Exporting Countries	13.7	20.3	10.3	15.2
Lower Middle-Income Countries	15.5	23.2	9.2	12.5
Upper Middle-Income Countries	12.4	17.8	10.1	15.4
All Middle-Income Countries	13.5	19.6	9.6	14.4

SOURCE: *World Development Report,* 1983, pp. 178–79.

first become a matter of general concern. Looking in more detail at events between 1970 and 1981, we find that the external debts of non-OPEC developing countries grew more rapidly than their national incomes after 1973, but that the ratio of debt service to export earnings grew only gradually until the alarming increases in 1981 and 1982.[6] In assessing the role of U.S. economic policy in the development of the international debt crisis, therefore, it is useful to consider separately the period from 1973 to 1980 and the period since 1980.

The fourfold increase in the price of crude oil that occurred in late 1973 and early 1974 was widely believed to be an important factor contributing to the world recession of 1974–75. In the Keynesian framework of macroeconomic analysis that dominated official thinking and policy making at that time, the oil price increase was seen as contributing to the recession because the OPEC countries were running huge payments surpluses which represented substantial increases in world savings (at a given level of world income). If not offset by a corresponding increase in spending somewhere else in the world, then (the argument concluded) there would be a reduction in world aggregate demand and in world output. The policy prescription, therefore, was for the governments of the major industrial nations, especially in the United States, to run budget deficits to offset the OPEC surplus. In addition, the world financial system was called upon to assist in recycling the OPEC surplus from the OPEC countries that wished to save to countries that wished to borrow and spend. Given this policy objective, governments and regulatory authorities in the United States and other industrial countries generally looked with favor on developments in the international banking system that facilitated increased borrowing by developing countries. Concern was occasionally expressed about excessive borrowing by one or two developing countries, but lending by the international banking system to most developing countries was not discouraged, controlled, or even monitored. Indeed, I recall that at a conference I attended on the subject in 1975, one speaker commented that the problem was not that countries would borrow too much from the international banking system, but rather that there was no country to serve as "the borrower of last resort."

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[6] The *World Development Report 1983,* pages 20 and 21, indicates that for all developing countries the debt service ratio rose from 9 percent to 13 percent between 1974 and 1980 and then rose to 21 percent in 1982. For the middle-income oil importers, the debt service ratio was at 14.9 percent in 1980 versus 14.0 percent in 1970. By 1982, the debt service ratio for middle-income oil importers had risen to 23.0 percent.

My point here is not that recycling of OPEC surpluses through the international banking system to developing countries was undesirable. On the contrary, the relatively good growth performance of many developing countries that did borrow substantial sums suggests that the resources that were borrowed were put to productive use. The point is that it was the policy of the United States and other industrial countries to facilitate the development of the international banking system that allowed for and encouraged much of this borrowing. To the extent that this system permitted the world economy to function better than it otherwise would have during the 1970s, these policies deserve some of the credit. To the extent that this system has developed serious problems since 1981, these policies deserve some of the blame.

Another mechanism through which U.S. economic policy contributed to increased borrowing by developing countries during the 1970s and thus to the current problems of the international financial system was by contributing to a generally low level of real interest rates for U.S. dollar-denominated loans and to a general decline in the foreign exchange value of the U.S. dollar between 1976 and 1980. Econometric studies have generally found it difficult to establish a clear link between monetary or fiscal policy and the level of real interest rates or the behavior of exchange rates. Despite this lack of clear-cut econometric evidence, I believe that U.S. macroeconomic policy, especially monetary policy, did have the effect of keeping real interest rates in the United States lower than would otherwise have been the case, and lower than real interest rates were in most other industrial countries. It was certainly a key objective of monetary policy for the first three years of the Carter administration to facilitate growth of output and employment by supplying adequate liquidity to the economy. I also believe that the general perception that the Federal Reserve was pursuing a loose monetary policy between 1976 and late 1979 and again during the summer and fall of 1980 contributed substantially to the weakness of the U.S. dollar in foreign exchange markets. The quantitative effect of low real interest rates in the United States and of the declining foreign exchange value of the U.S. dollar on the extent of borrowing by developing countries between 1976 and 1980 is not known. The *direction* of the effects, however, is clear. When real borrowing costs are expected to be low, there is a greater incentive to borrow than when real borrowing costs are expected to be high. When year after year a country finds that the value of its debt declines relative to the value of its exports because its debt is denominated in U.S. dollars and export prices reflect a weighted average of the values of national currencies, then borrowing is also likely to be encouraged.

The third mechanism through which U.S. economic policy contributed to the growth of borrowing by developing countries in the 1970s was by assisting in maintaining a high world price of crude oil. The overall effect of the energy policies adopted by the U.S. government between 1974 and 1980 was to discourage domestic production of oil and other energy sources by keeping prices to producers artificially low, to encourage domestic consumption by keeping prices of energy to consumers artificially low, and to encourage oil imports through the allocation scheme for low-priced domestic crude oil. All of these effects contributed to a higher world demand for OPEC oil and thus to a higher world price of oil. Between 1976 and 1979, the declining foreign exchange value of the U.S. dollar reduced the price of OPEC oil (which was priced in U.S. dollars) for countries whose currencies appreciated against the U.S. dollar. This decline in oil prices for other countries, however, stimulated their demand for oil during this period and made the world oil market so tight by 1979 that the supply disruptions associated with the Iranian revolution could not be absorbed without another massive increase in the world oil price.

The high world price of oil contributed to the growth of borrowing by developing countries in different ways for oil importers like Brazil than for oil exporters like Mexico. For oil importers, the increase in the world oil price in 1973 and again in 1979 meant a substantial increase in import costs. This increase in import costs could be absorbed either by reducing other imports and increasing exports or by increased borrowing. With real interest rates very low, especially for U.S. dollar-denominated loans, many oil importers decided to borrow to finance at least part of the increased cost of oil imports. For oil exporters, higher world oil prices meant increased export revenues. For some of these exporters like Kuwait and Saudi Arabia, increased revenues were so large that they became substantial net lenders. Other oil exporters with greater domestic absorptive capacities borrowed on the expectation of future oil revenues to finance ambitious development programs whose costs exceeded current revenues from net exports. The outstanding example of a country that pursued such a program is Mexico, which has accumulated the second largest external debt of any developing country.

In summary, by the end of the decade of the 1970s, the external debt of oil-importing developing countries and of some important oil exporters had grown substantially relative to the national incomes of these countries, but debt service requirements had risen only modestly relative to export earnings. Much of the debt of these countries was denominated in U.S. dollars and was owed to the international banking system. The growth of such debt was encouraged by policies of the United States and other industrial countries that facilitated the development of the international banking system as a mechanism for recycling OPEC surpluses. It was also encouraged by the low level of real interest rates on U.S. dollar-denominated loans and by the declining foreign exchange value of the U.S. dollar, both of which were at least partly the consequence of U.S. monetary policy. U.S. energy policies which affected the world price of oil also contributed to the growth of external debt of oil-importing developing countries and some oil exporters.

The Development of the Crisis since 1980

The current crisis of the international financial system began in 1981 and intensified in 1982 and 1983 because of serious and growing concern about the willingness and ability of many developing countries to meet their external debt service obligations. The proximate causes for this concern were the sharp increase in debt service requirements of many developing countries, the sudden and substantial declines in their export earnings, and the growing doubt about the willingness of the governments of some developing countries to pursue tighter monetary and fiscal policies in the face of declining domestic output and employment. The economic policy pursued by the United States, especially its monetary and fiscal policy, contributed directly to all of these developments.

To understand the role of U.S. economic policy in this regard, it is useful to summarize briefly the recent history of U.S. macroeconomic policy. In an effort to slow a rapidly accelerating inflation rate, the Federal Reserve tightened monetary policy in late 1979 and early 1980. The consequence of this tightening and of rising inflationary expectations was to force nominal interest rates upward until March of 1980. The tightening of monetary policy and the rise in interest rates, along with other factors, pushed the U.S. economy into sharp but short recession in the spring of 1980. As output declined and inflationary expectations abated, nominal interest rates fell precipitously between April and June of 1980. Concern with recession (and perhaps also with the presidential election) led the Federal Reserve to shift to an easier monetary policy between June and November of 1980. As the economy recovered and inflation accelerated, nominal interest rates began to rise in the summer of 1980. To combat resurging inflation, the Federal Reserve moved to a tighter monetary policy starting late in 1980 or early in 1981.[7] As a consequence of monetary restraint and still-rising inflationary expectation, nominal interest rates rose above their peaks of March of 1980 by year-end and continued to rise to even higher levels during the first half of 1981. During this period, real interest rates rose substantially from the negative levels experienced during the late 1970s to positive levels of 4 to 8 percent per year.

After a strong first quarter in 1981, the U.S. economy began to slide into recession. The recession deepened through the first half of 1982 and recovery did not begin in earnest until 1983. Monetary policy remained quite tight until the summer of 1982, when the Federal Reserve shifted to a substantially easier policy. Nominal interest rates moved slightly and erratically downward between mid-1981 and mid-1982, but real interest rates increased slightly due to the significant decline in the inflation rate. With the easing of monetary policy in mid-1982, nominal interest rates declined more substantially, but real interest rates remained very high by historical standards. With evidence of strong recovery by mid-1983 and perhaps because of concern with future inflation, the Federal Reserve apparently shifted to a somewhat tighter monetary policy. In late 1983, nominal interest rates were generally running 1 to 1.5 percent above their year-earlier levels, and with the continuation of low inflation, real interest rates remained quite high.

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[7] If monetary policy is measured by growth rates of money, then monetary policy remained fairly loose through the first quarter of 1981. Interest rate behavior, however, indicates significant tightening of monetary policy starting late in 1980. Continued growth of the money supply during the first quarter of 1981 was probably a response to the strong real growth of the economy during that quarter, and this monetary growth was actively resisted by the Federal Reserve.

Fiscal policy since 1979 has shifted in the direction of greater ease due partly to the continued growth of federal spending (especially for national defense) and partly to President Reagan's tax reduction program. It is arguable that the large actual and prospective fiscal deficits associated with this policy have contributed to higher real interest rates by increasing the actual and prospective real demand for loanable funds and perhaps also to higher nominal interest rates by increasing fears of future monetization of deficits.[8] With respect to the effect on real interest rates through the demand for loanable funds, however, it is probably relevant to look not only at the U.S. government deficit but also at the deficits of the governments of other industrial nations and at the OPEC surplus. Comparing the period 1977–79 with the period 1981–83, there has been a dramatic increase in the fiscal deficits of governments of the industrial countries from about 1 percent of their national incomes to about 5 percent of their national incomes. Comparing these same periods, the OPEC countries moved from substantial payments surpluses to actual payments deficits. These developments imply a massive increase in the net demand for loanable funds by the combination of the governments of the industrial countries and the OPEC countries. In light of this development, it is perhaps not so surprising that the level of real interest rates has moved from minus 2 or 3 percent in 1977–79 to plus 4 or 6 percent in 1981–83.

The other major development that is related to the situation of debtor countries and to U.S. economic policy since 1979 is the strong appreciation of the U.S. dollar. In nominal terms, the U.S. dollar has appreciated about 25 percent in terms of a trade-weighted basket of the currencies of the other industrial countries. Corrected for movements in national price levels, the real appreciation of the U.S. dollar relative to a trade-weighted basket of these currencies has been even greater. In my judgment, a substantial fraction of this real appreciation can be attributed to the change in the actual and perceived stance of monetary policy in the United States. In the late 1970s, it was widely believed that the Federal Reserve was pursuing a relatively loose monetary policy and was tolerant of a high inflation rate. This belief led to a low value of the U.S. dollar in the foreign exchange markets and to the expectation that the value of the dollar would continue to decline. Since 1981, beliefs about the Federal Reserve's policy have changed. The Federal Reserve is now perceived as quite concerned about inflation—a concern that was demonstrated by its willingness to tolerate a long and deep recession and a prolonged period of very high nominal and real interest rates. This changed perception of the Federal Reserve's basic attitude toward inflation should have increased the attractiveness of holding dollars relative to other national currencies and thereby have strengthened the foreign exchange value of the U.S. dollar. In addition, it may be that the higher level of real interest rates in the United States made necessary by the government deficit has attracted foreign capital to the United States (to finance part of this deficit) and has thereby contributed to the strength of the U.S. dollar in foreign exchange markets.

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[8] Historical evidence does not suggest a strong, or even a positive, correlation between deficits and real or nominal interest rates. Such evidence, however, may not be relevant to the present case of a large structural deficit, in contrast to a deficit that is primarily cyclical.

These developments in U.S. economic policy since 1979 have adversely affected the situation faced by developing countries with substantial amounts of foreign debt. First, the high level of nominal and real interest rates since 1981 has increased substantially the amount of interest that these countries must pay on their external debts. Indeed, since nominal interest rates in the United States in 1981–82 were about double the level of 1978–79, the interest component of dollar-denominated loans was approximately doubled between these two periods. In addition, the much higher level of real interest rates means that the amount of real interest that a debtor country must pay to keep the real value of its debt constant has risen from a negative level to 4 percent to 6 percent per year on its outstanding dollar-denominated debt. This has meant a significant deterioration of the apparent credit-worthiness of many developing countries according to the conservative standard of being able to pay at least the real interest that is due on their outstanding debt.

Second, the strong real appreciation of the U.S. dollar has sharply increased the real value of the outstanding debt of developing countries, most of which is denominated in U.S. dollars. Thus, the real debt service that must be paid to keep the real value of debt from expanding has risen both because of a higher real interest rate and because this real interest rate is applied to a higher real value of outstanding debt. In addition, the real appreciation of the U.S. dollar has meant a decline in the real value of the exports of many developing countries to the industrial countries. This is so because many developing countries sell their goods not only to the United States but also to other industrial countries, and the decline in the real foreign exchange value of the currencies of these other industrial countries has been associated with a decline in the real dollar value of the exports of developing countries to these industrial countries.

Third, the export earnings of developing countries have fallen since the late 1970s as a consequence of the deep recession that has afflicted the industrial nations. This decline in export earnings has contributed directly to concerns about the credit-worthiness of developing countries with large external debts because export earnings represent the foreign income that might be available to service these debts. In addition, the decline in exports of developing countries has contributed to the general decline in output and employment in these countries, which has made it more difficult for their governments to pursue restrictive monetary and fiscal policies that would increase the net foreign income available to service external debts. To the extent that tighter monetary policy in the United States has contributed to recession in this country and elsewhere in the industrialized countries, therefore, it has contributed through these mechanisms to the problems faced by developing countries and the international financial system with respect to the external debts of developing countries.

Fourth, for reasons already discussed, higher real interest rates have contributed to the debt problems of developing countries. To the extent that large actual and prospective deficits of the U.S. government have contributed to a higher level of real interest rates, therefore, they have contributed to these problems and hence to the crisis in the international financial system. In effect, one could argue that the large fiscal deficit of the U.S. government and the governments of the other industrial countries has crowded developing countries out of the world credit market and has forced up interest rates on their already outstanding loans.

Conclusion

The preceding discussion has emphasized the role of U.S. economic policy in the evolution of international debt problems of the developing countries during the 1970s and in the culmination of these problems in the crisis that has beset the international financial system since 1981. Rather than reviewing the main points of that discussion, it is appropriate to conclude this paper by mentioning some important qualifications. The problems currently confronting debtor countries and the international financial system are certainly not the sole responsibility of the U.S. government. Excessive borrowing by some developing countries and imprudent lending by some financial institutions have also played important roles. So too have changes in economic conditions affecting output and employment levels, trade volumes, interest rates, and prices that were the consequences of policies of other governments or were beyond the influence of any government policy. Moreover, while there has been a tendency in this country to disregard the role of U.S. government policy in contributing to the current crisis of the international system, our policy has generally not contributed to this crisis because of a calculated attempt to improve the economic position of the United States at the expense of other countries. On the contrary, the United States suffers harm from the current disarray in the international financial system and would suffer greater harm if there were a general breakdown in this system that might occur in the event of an outright default by one or a number of developing countries with substantial external debts. We also suffer significant economic harm from depressed levels of economic activity in many debtor countries, and we would almost certainly benefit from any development that would allow these countries to meet their external obligations without such serious sacrifices of output and employment. Finally, it should be emphasized that the policy developments in the United States that contributed most seriously to the current problems of debtor countries and of the international financial system were generally errors of policy conduct from the standpoint of purely domestic economic objectives. The relatively easy monetary policy of the United States in the late 1970s which contributed to the growth of borrowing by developing countries was harmful to the United States by fueling an acceleration of inflation. This policy and the flip-flop in monetary policy that occurred in 1980 were also harmful because they made it necessary for the Federal Reserve to pursue a tight monetary policy for a long time in 1981–82 in order to reduce inflation and restore the credibility of the monetary authority. Thus, the record shows that a macroeconomic policy that adversely affects the U.S. economy is also likely to be bad for the rest of the world. Conversely, I believe that a more stable and predictable macroeconomic policy in the United States would serve our interests while serving the interest of the rest of the world.

RESOLVING THE DEBT PROBLEM: SOME POLICY CONSIDERATIONS

Karl Brunner

Introduction

The debt problem examined by Michael Mussa (1984) attracted the attention of the Shadow Open Market Committee during the summer of 1982.[1] I had an opportunity at the time to discuss the international debt problem in detail with my friends at the Swiss National Bank. These discussions alerted me to the deep concern about international financial developments among central bankers. The emerging situation clearly demanded careful attention. A systematic clarification of what proper policies should or should not do became quite urgent at the time. A sudden crisis was widely expected to threaten the world with a deflationary collapse. Fears of such economic collapse motivated proposals for monetary reflation or schemes to bail out creditor banks or debtor nations. Economic collapse was certainly possible, but would require remarkable mismanagement by policy makers. Neither inflation nor bail-out policies were moreover required to exorcise the threat of a depression triggered by a financial crisis.

A successful policy should thus be designed to avoid deflation on the one side and also avoid renewed inflation or bail-out schemes on the other. The longer-run dangers associated especially with the latter schemes seemed to be essentially neglected in public discussions. Bail-out schemes only postponed the adjustments needed in the balance sheets of creditor banks and the policies pursued by debtor nations. Most important, neither bail-outs nor renewed inflation are necessary to prevent worldwide economic disaster.

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[1] See the Shadow's *Policy Statement and Position Papers*, September 1982.

The uncertain drift in policy motivated me to assemble some friends to form the Ad Hoc Committee on International Debt. We met in January 1983 in Washington, D.C., and issued a statement presenting three guidelines for policy makers: Policy needs to be aimed at avoiding deflation, inflation, and any bail-out.[2] Our statement discussed in some detail the nature of the policies required. It elaborated in particular the importance of the "lender of last resort" function and differentiated this function from bail-out schemes. A liquidity crisis can be effectively handled by the "lender of last resort" without operating a bail-out; that is, assuming the losses of bad credits initiated by creditor banks. We also emphasized that technical insolvency would not justify the closure of a bank. It should be encouraged to continue as an operating unit, possibly under a new management, and its earnings should be used over time to write off the losses on credit accounts.

Explaining the Debt Problem: Two Hypotheses

In choosing suitable policies to cope with the debt problem, we need to recognize the conditions responsible for the problem. An examination of these conditions forms the basis of Mussa's paper. Two major and conflicting hypotheses emerge in discussions of the origins of the debt problem. One hypothesis attributes the current debt problem to general and worldwide economic conditions. These conditions, however, are not systematically connected with special patterns of debtor nations. The alternative hypothesis addresses an array of specific arrangements and conditions characterizing *some* debtor nations. Among these conditions the political structure and its operation loom with particular force. The monetary and fiscal policies, the exchange rate and trade policies, and the evolution of the government's police powers in economic matters form the core of the relevant specific conditions.

I wish to make clear at the outset that the first hypothesis is quite erroneous in spite of its frequent occurrence in the public arena. It fails to explain some crucial facts about the noteworthy variation in the economic fate observed among debtor or creditor nations. We encounter a similar issue in the context of the inflation problem. The rate of inflation expressed by the movement of the general price level informs us about the location, or position, of the distribution of price changes. It reflects the common element contained in all price changes dominantly attributable to monetary evolution. But this information cannot tell us what items exhibit price changes in the upper tail of the distribution. The items placed under the upper or the lower tail experience specific allocation effects independent of the common strand. The typical occurrence of a substantial variance of the pattern of price changes implies therefore that specific characteristics of items appearing in the upper or lower tail cannot be explained in terms of the general or common strand. Information is required about specific market conditions, about allocative factors shaping the real conditions affecting one market relative to other markets.

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[2] See Brunner et al. (1983).

The general conditions adduced under the first hypothesis are the OPEC oil-price shock and the worldwide simultaneous shift from inflationary to disinflationary policies. But the common experience of two OPEC price shocks affected some debtor nations very differently. Mexico and Venezuela gained, whereas Taiwan, Brazil, and Argentina lost as a result of these events. Some debtor nations also gained at the cost of creditor nations. The OPEC shock did not systematically discriminate against debtor nations in favor of creditor nations. Similarly, the shift in policy from inflation to disinflation initiated around 1980 cannot explain the difference between Mexico, Brazil, and Argentina on the one side and Korea, Taiwan, Singapore, and Malaysia on the other. An unexpected change from inflation to disinflation does impair the economic position of debtors. It tends to raise the real burden of their debt service to the extent that they are locked into long-term debt at high nominal rates of interest which are not adjustable to new market situations. But the significant variance in the experience of debtor nations, independent of the comparative magnitude of their foreign indebtedness, remains a decisive fact incompatible with the first hypothesis.

This fact compels us to look beyond the common strand. We need to examine the specific situation of individual debtor nations. The large differences observed in the economic fate of debtor nations seems moreover not to depend on the relative magnitude of their indebtedness. The variation observed needs to be associated with national differences in economic arrangements, policy institutions, and domestic policies.

Mussa correctly emphasizes that our financial policies contributed little to alleviate the international debt problem. The policy of uncertainty and drift prevented the return to single-digit interest rates, lowering the debt service burden of debtor nations. But other nations, debtors and Western developed nations, could modify the consequences with suitable strategies for their own policies. Some nations, however, chose "to dig even bigger holes" of their own and proceeded on a somewhat reckless financial course, possibly encouraged by shortsighted foreign loan officers at some Western banks.

Policy Considerations

What are the policy conclusions derived from a recognition of the crucial significance attributable to domestic policies and internal institutional arrangements? I return for my answer to the statement of the Ad Hoc Committee on International Debt. The U.S. government needs first and foremost to replace the erratic and unpredictable course of monetary policy making with a stable and predictably noninflationary arrangement. The budget should be contained and balanced in order to avoid the remarkable spectacle of the richest nation tapping world savings in order to finance its budget deficits.

We also surely need to exorcise any threat of a deflationary collapse. This does not require that we bail out the creditor banks. Central banks should acknowledge and understand their role as lenders of last resort. This function could of course be misused and be converted into a hidden bail-out. It is therefore important that the lender of last resort does not absorb the losses of the creditor banks. These losses, however, should still be treated with some circumspection. The losses suffered on bad loans do not justify the closure of banks. They should be given an opportunity to generate a stream of earnings into the future. These earnings of an operating unit provide the basis for a gradual write-off of affected loans. A bail-out of creditor banks would create incentives among bankers to neglect careful evaluations of risk and systematically shift the risk to "government." This pattern would eventually encourage a "creeping nationalization" of the financial industry. A bail-out also imposes arbitrary and distorted standards on regulatory agencies. Once introduced for a particular purpose, political temptations will induce a wider application also to domestic affairs. Under the circumstances, the loan business would be increasingly guided by political criteria.

A bail-out of creditor nations, on the other hand, involves a continued supply of new and additional credits to debtor nations. The flow of new credits should ensure the continued servicing of the old debt. This amounts to a Ponzi scheme on a truly vast scale, and like all Ponzi schemes it will eventually collapse, involving much larger losses and more serious adjustment problems than currently required. An immediate initiation of necessary adjustments on the part of both debtor nations and creditor banks imposes over the longer horizon smaller costs on all parties involved. This process of adjustment is to some extent under way but should be systematically encouraged by our regulatory agencies and our government. The gradual adjustments in balance sheets and the associated negotiations concerning outstanding loans will have all the appearances of a "muddling through," reflecting the groping toward unavoidable adjustment.

The moral hazard posed by the Ponzi scheme to "solve the debt problem" seems rarely recognized. Such schemes essentially encourage the debtor nations in troubled positions to continue their bad policies which contributed so effectively to the "debt crisis." We also hear that it is necessary to maintain exports of major industrial nations. In the absence of new credits to debtor nations, our exports would shrink by a large magnitude. The decline of exports would trigger a collapse of the world economy. This picture of doom is vastly exaggerated. Exports of industrial nations would probably suffer. But suitable domestic macro policies would effectively prevent any contractive spillover from export industries to the rest of the economy. The experience of Sweden and Switzerland in the early 1930s illustrates this point with remarkable force.

Is There an Insolvency Problem?

One particular aspect of debtor nations' positions needs our attention. We usually encounter references to their "insolvency problem." This phrase, however, obscures the real situation. These nations possess large quantities of real resources owned by the government. The government could raise funds to repay debt or service debt by selling its real assets or converting some debt into equity claims on domestic real resources owned by the government. We will be confronted, of course, with the objection that this is not politically feasible. This objection, however, establishes the crucial point. We do not face an insolvency problem but an *unwillingness* to service the accumulated debt once a history of misconceived policies produces a serious debt problem. We learn from this experience that the specific risks associated with individual private borrowers are a minor problem compared with the sovereignty risk posed by the behavior of national governments. There exist established procedures for the case of individual insolvency and these procedures provide some protection for the creditor. No such procedures exist for the context of sovereignty risks: International relations are not embedded in a legal system with an enforcement apparatus. International relations are best understood from the vantage point of an anarchy model. Such a model provides the background for a proper appreciation of the sovereignty risk.

Some Concluding Remarks

Let us now consider the role of macro-policies pursued by creditor nations. Mussa especially emphasizes interest rates, the dollar exchange rate, and the recession. He notes in particular that the recent recession was the largest since the 1930s. This is not the case for the United States in spite of assertions made to this effect in the media. But Mussa is right with respect to West Germany and probably also the OECD group as a whole. The recession certainly aggravated the debtor nations' debt burden. The shift from an inflationary policy to a disinflationary policy also created problems for domestic debtors in the industrial nations. But once more this recession cannot explain adequately the severity of the Argentinian, Brazilian, Mexican, or Venezuelan difficulties as contrasted with those of the other debtor nations. The point is that macro-policies did impose a burden on *all* debtors, but some pursued policies better designed to cope with a difficult situation while others chose to aggravate their problem with poorly conceived policies.

The interest rate problem also deserves some careful attention. At times Mussa appears to fall into the trap of attributing a higher level of interest rates to a restrictive monetary policy. It is a well-established fact, however, that while a restrictive monetary policy may initially raise short-term interest rates, it will eventually *lower* nominal rates. The trend of interest rates in the United States was actually downwards from 1981 to the spring of 1983.

My point, however, does not absolve the United States together with other industrial nations from responsibility for the high level of interest rates. A rising ratio of real debt to real income increased the basic real rate somewhat above the level prevailing in the 1960s. A policy of permanent inflation embedded a substantial inflation premium into nominal rates of interest. In addition, the uncertain course of financial policies generated a risk premium that became incorporated in the gross real rate of interest. This premium reflects the purchasing power risk attached to government bonds free of default risk. Lastly, our financial policies confronted the debtor nations with an additional risk. The foreign debt is usually denominated in the creditor nation's currency. Erratic financial policies raise the variability of exchange rates and thus amplify the debtors' risk associated with the debt service.

These aspects indicate that my initial emphasis on the role of debtor nations' domestic policies cannot excuse our own bad policies—a conclusion supported by Mussa. The United States is burdened with a particular responsibility in this respect. The failure to discharge this responsibility affects all nations, debtor and creditor, including the United States. We need to develop some basic "rules of the game" bearing on the budget, monetary, and trade policy. These rules should offer a stable framework yielding stable expectations bearing on predictable patterns. An "institutionalization" of such policies discussed in the *Economic Report* for 1982 prepared by the President's Council of Economic Advisers would actually contribute to a major alleviation of problems imposed on the world by the U.S. government's uncertain drift.

The necessity of this redirection of U.S. policy, however, does not establish its sufficiency with respect to the resolution of the debtor nations' problem. The debtor nations ultimately need to attend to their own "house cleaning." Their own foolish policies and poorly conceived domestic institutions would create some debt problem even in the context of much wiser U.S. financial policies.

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REGULATORY ASPECTS OF THE WORLD DEBT PROBLEM

A. James Meigs

Introduction

"Give me a fast ship for I intend to go in harm's way."[1] Some may think I borrowed that line from John Paul Jones to describe the attitudes of European, Japanese, and American bankers when they set sail for the less-developed world during the 1970s. The spectacular flowering of debt problems that we have witnessed suggest that the bankers who made loans that are being questioned now were too casual in their approach to risk. The debt problems also might suggest that the regulators and supervisors who were supposed to be watching the bankers while they made the loans were either negligent or underpowered.

Actually, I chose that line because it sums up for me an approach to risk that Aaron Wildavsky (1983, p. xv) calls "resilience." In an essay on regulation, he said resilience "is the capacity to use change so as to better cope with the unknown; it is learning to bounce back."

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[1] John Paul Jones, as quoted in Roscoe (1953, p. 1). Morison (1959, p. 182) has an expanded version of the line in his biography of Jones. After rejecting several captured British ships offered him by the French, Jones wrote in a letter quoted by Morison, " ' I wish to have no connection with any Ship that does not sail *fast*, for I intend *to go in harm's way*. . . . I would rather be shott ashore than sent to Sea in such things as the Armed Prizes I have described.' " [Italics in original.] Morison added, "Yet it was his fate never to command a ship fast enough to force battle on a foe that chose to flee."

It does not mean rushing heedlessly into harm's way. It means being able to respond quickly to the unexpected.[2]

Opposed to resilience, as a way to handle risk, is "anticipation." Anticipation is the attempt to avert potential dangers before any damage is suffered. This is the approach to risk that presumably underlies the financial regulations that are the topic of this paper. The case for regulating both domestic and international financial markets rests on an assumption that managers of banks and other financial institutions, if left to their own devices, might neglect to provide adequate protection against potential risks for their depositors, stockholders, and the general public. Bankers and their stockholders cannot be left to stew in their own juice if trouble strikes, the regulators say, because sound banks are essential to the effective conduct of national monetary policies and to the general health and prosperity of the economy. Governments, therefore, impose regulations designed to limit financial managers' freedom to get their institutions into trouble.[3]

Today, legislators, government officials, and many members of the international financial community are seriously considering proposals for adding new regulations and reinforcing old ones in international financial markets.[4] Bankers and financial regulators were surprised by the rise of international debt problems. There is no doubt about that. Consequently, advocates of increasing regulation and other forms of governmental intervention believe governments should provide more guidance to financial institutions in getting out of their current difficulties. They also believe that regulatory safeguards should be erected to prevent such problems from recurring.

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[2] John Paul Jones epitomizes the quality of resilience, the ability to bounce back. Although hoping for a fast ship, he settled for a slow one, the *Bonhomme Richard*, with which he won his famous victory over *H.M.S. Serapis*, on September 23, 1779. Unable to outsail the faster, better-armed *Serapis*, with much of his crew killed by explosions of the *Richard's* own guns on the first broadside they fired, and raked repeatedly not only by broadsides from *Serapis* but also by misdirected fire from the American frigate *Alliance*, Jones took *Serapis* by boarding from the mortally wounded *Richard*. This was also the night of that other memorable John Paul Jones line, "I have not yet begun to fight." Bankers with a loan workout problem might well keep that line posted in a prominent place. See Morison (1959, pp. 221–42.).

[3] In arguing the view that sound banks and bank regulation are necessary for the conduct of monetary policy, a policy statement of the Board of Governors of the Federal Reserve System (1983) says, ". . . the Federal Reserve as the nation's central bank must remain substantively involved in the regulation and supervision of the financial and banking system because those functions impinge upon its general responsibilities." The statement goes on to assert that the System's responsibilities for regulating banks "go back to the founding of the Federal Reserve System as an institution for forestalling and dealing with financial crises."

[4] Some of these proposals are discussed in Cline (1983, pp. 98–102).

The upwelling of support for regulating international financial transactions comes at the very time domestic financial markets in the United States and other countries are being deregulated. Domestic financial markets are emerging from almost 50 years of laboring under regulations that were initially intended to prevent financial managers from repeating mistakes they were accused of making before the Great Depression. U.S. Congresses of the 1980s have had to undo financial reforms legislated by the Congresses of the 1930s.

As we examine regulatory aspects of the international debt problem, we should consider the following questions:

1. What have we learned from domestic financial regulation in the United States?
2. How did financial regulators and supervisors react to the explosive growth of international banking and international debt after 1970? Where were the police when the riot started and what did they do about it?
3. Which is the more important source of international debt problems? Is it defective portfolio management in financial institutions? Or is it instability in the world monetary framework?

Lessons from U.S. Financial Regulation

There is an inescapable dilemma in attempting to avert risk through regulation. Regulation exacts a price; regulation reduces resilience in the system.[5] As Wildavsky (1983) argued in his essay, preoccupation with attempting to anticipate and to avert potential dangers uses up resources that might be better used in responding to actual dangers when they materialize. It also deprives people of experience in coping with failure. John Paul Jones never had a ship of the line. More guns and a stouter hull would have been handy when he was surprised, but he needed speed and maneuverability more.

The costs of regulation in terms of lost resilience can clearly be seen in the experience of U.S. financial institutions and markets under the regulations adopted in reaction to the Depression. I use the term regulation in a broad sense here to refer to any governmental intervention that directly influences portfolio management decisions in financial institutions, from rate regulation, through conventional supervision and examination, to nonstatutory, informal direct pressures from government officials, sometimes euphemistically called "moral suasion." I shall concentrate on those regulations and interventions that influence the selection of assets and liabilities in financial institution portfolios. Lender-of-last-resort arrangements are excluded; they are discussed in Humphrey and Keleher (1984).

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[5] The U.S. Strategic Air Command has a similar dilemma in the control of ICBMs. A dominant peacetime objective is to prevent accidental or unauthorized launches (called Type I errors by strategic analysts). Preventing Type I errors requires complicated physical constraints and organizational procedures, negative controls. But if war were actually to break out, the dominant objective would be to launch retaliatory attacks. It would then be important to minimize failures to launch weapons promptly against preassigned targets (Type II errors). Preventing errors of this type requires positive controls. The two types of controls inherently conflict; enhancing one diminishes effectiveness of the other. Steinbrunner (1984, pp. 37–45).

Failures and other difficulties of banks, savings and loan associations, insurance companies, and broker/dealer firms before and during the Depression led legislators to impose regulations designed to prevent such problems from arising again. Thomas Huertas (1983, p. 19) provides a graphic picture of the consequences for banks:

> Commercial banks . . . were made scapegoats for the worst economic disaster in the nation's history. Regulation became punitive. The efficiency of the financial system was sacrificed to the aims of safety and stability.
>
> According to Congress, stability depended on a safe banking system, and this required that each bank be safe. That in turn implied that each bank should be consistently profitable. The solution was to limit the risk to which a bank could expose itself and to restrict the competition to which a bank could be exposed.

Enforced specialization in lines of business, geographic restrictions on entry, and regulation of rates paid on deposits were supposed to keep bankers and managers of other financial institutions from engaging in excessively risky and destructive forms of competition. Deposit insurance was introduced to protect small depositors from loss in bank failures, and to prevent runs on banks.

During the 1960s and 1970s it became increasingly evident that the Depression-inspired regulations adopted in the 1930s made it difficult for U.S. financial institutions to cope with a completely different and unforeseen set of problems. The new problems for portfolio management were raised by high, and highly variable, interest rates, inflation, and a series of recessions. Banks and other institutions innovated feverishly to find ways to survive under the rate regulations that were originally supposed to protect them from risk. Arthur Burns (1977, p. 423) commented on some of the early manifestations of banker restiveness under regulation in a 1977 report to Congress:

> In brief, what bankers did [in the 1960s] was to reach out for new business far more aggressively than they had formerly. To that end, they devised new techniques—many highly ingenious—for gathering deposits and making loans. . . . Banks that previously served only local markets sought to become regional in scope; regional

> banks moved to establish a national presence; and our Nation's largest banks looked more and more to opportunities abroad.

He thought the pendulum had swung too far too quickly. "Excited by the profit gains that the drive for growth yielded in the 1960s, a good many bankers paid less heed than they should have to traditional canons of banking prudence" (p. 423). He expressed some concern over the fact that bank equity capital did not grow in step with bank assets.

The Chairman said uneasiness about banking trends was not just attributable to the thinning of banks' equity capital cushion. How asset growth was achieved was also of key importance (p. 424):

> The 1960s witnessed the birth and rapid spread of so-called liability management by banks—a technique that in practice involved heavy reliance on borrowed funds, often very short-dated funds, to accommodate loan requests. Thus, uneasiness was engendered not only by the rapid expansion of assets relative to equity but also because that expansion rested so heavily on volatile resources.

The movement of U.S. banks abroad that Chairman Burns observed was especially interesting in view of what happened later. U.S. banks had found that the prohibition of payment of interest on demand deposits, Regulation Q ceilings on time deposits, and reserve requirements placed them at a disadvantage in competing with banks of other countries. Even more important, when interest rates rose, U.S. banks found it difficult to raise funds for their domestic loans and investments. They learned in the mid-1960s to go overseas to tap the new Eurodollar market for funds, where rates were not regulated.

According to the Comptroller of the Currency (1970, p. 20), there were three national banks with foreign branches at the end of 1960. These three banks' 85 branches reported total assets of $1.6 billion. By the end of 1970, 59 national banks were operating 497 foreign branches with total assets of $39.9 billion. The high concentration of new offices in London and Nassau suggests that the 1960s out-migration of U.S. banks was largely to gain access to Eurodollars, although it was also possible to raise Eurodollars through correspondents.

Much of the movement of U.S. banks abroad probably would have occurred eventually in any case, but domestic regulation of U.S. financial institutions and markets undoubtedly accelerated it. It is interesting to note that if regulated financial markets are supposed to be less risky than unregulated ones, the regulations themselves induced banks in this case to shift some of their operations into the presumably riskier markets.

However, regulations of the sorts adopted in the 1930s legislation did not necessarily reduce risks faced by financial institutions. This is because the regulators did not stop at promoting safe and sound conditions in financial institutions and markets. Regulation, as actually practiced, was used also to influence portfolio management decisions in pursuit of other governmental objectives. For example, deposit-rate regulation and the enforced specialization of savings institutions in mortgage lending were used to channel funds into homebuilding at preferential rates as a matter of national policy. Under the high interest rates and inflationary conditions of the 1970s, this use of financial regulation pushed savings institutions into a highly risky condition.

Another example of a shift in the objectives of financial regulation came during the 1966 and 1969 episodes of credit restraint in the United States, when the Federal Reserve System experimented with using Regulation Q ceilings on the rates banks could pay on negotiable certificates of deposit (CDs) as the "cutting edge of policy."[6] Proponents of the "cutting edge" view had hoped that banks would reduce their business loans if a rise of market interest rates above the Regulation Q ceiling made it difficult for them to issue CDs. The long-run costs to the banks of reneging on their loan commitments to corporate customers would have been very high, if the banks had been unable to find a substitute for CDs as a funds source. The chief result of the strategy, therefore, was to drive banks overseas to borrow Eurodollars when their domestic CDs ran off.

Regulation, furthermore, was not always based on statutory authority. For example, during the attempts by the Johnson and Nixon administrations to curb U.S. capital outflows, the so-called Voluntary Foreign Credit Restraint Program requested U.S. banks not to increase overseas loans above levels specified in relation to an earlier base period. One result was to increase bank risk by raising uncertainty about what the authorities expected and about how they might retaliate against institutions that did not comply with the "voluntary" program. Another result was to increase the participation of U.S. banks in the Eurodollar markets. Dollars raised overseas could be lent overseas, without violating the capital controls. After the controls were relaxed in December 1973, the Federal Reserve Board (1975, p. 74) reported a large increase in foreign loans from home offices of U.S. banks.

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[6] For an account of the interaction of U.S. controls and the Eurodollar market, see Meigs (1972, pp. 220–28).

The purpose of citing these cases in which U.S. financial regulations were used for objectives other than to maintain a safe and sound financial system is to remind us that new regulatory powers conferred on national governments or international agencies may not be used solely for their declared objectives either. Governments come and go; their decisions are subject to political pressures that are difficult for financial managers to predict. Therefore, we should not assume that increasing regulation in international financial markets would reduce risk and uncertainty there. It would instead bring some arbitrary powers into the picture who from time to time could change the rules facing portfolio managers, and thus increase risks.

Additional regulation would also, if the U.S. experience is any guide, reduce resilience in the international financial system by reducing the freedom of managers to adjust to unexpected changes in market conditions. Regulators tend to be slow and deliberate in adjusting their policies to changing conditions. U.S. banks and other financial institutions were fortunate in being able to use international markets for relief when domestic regulations were not adjusted to changing economic conditions in the 1960s and 1970s.

The deregulation movement made little headway against bureaucratic inertia in the United States until Congress was confronted with the prospect of disaster in savings institutions, unless deposit-rate controls were relaxed and unless institutions were granted broader lending and funding powers. People in government agencies, like anyone else, are extremely reluctant to give up any powers they may have. Furthermore, if the original purposes for which powers were conferred decline in importance, government agencies have proved to be more likely to find new uses for their authority than to give any of it up.

The Regulators' Response to Growth of International Banking and International Debt

The U.S. Comptroller of the Currency (supervisor of national banks) formed an International Division during the 1960s, to follow the Comptroller's national bank clients overseas when they opened branches to tap the Eurodollar market. Each annual report in the 1970s commented on the increases in U.S. banking activity overseas and the corresponding growth in overseas activities of the Comptroller's examining force. By 1974, the International Division had become deeply involved in "the always sensitive and difficult quality determination of loans to countries" as industrial nations and lesser-developed countries adjusted to the 1973 OPEC shock to oil prices (Comptroller of the Currency, 1974, p. 21).

The Comptroller's overseas activities appeared mainly to be adaptations of standard supervisory examination functions to meet the spreading of national bank branches and subsidiaries to locations in other countries and the growth of foreign exchange trading.[7] Comptroller's staff members cooperated with their counterparts in the Federal Reserve System and in the supervisory agencies of other countries.

The Federal Reserve Board (1973, p. 92) issued an interpretation of its responsibilities for supervising international operations of member banks in May 1973: ". . . the Board has sought to assure that the international operations of member banks would not only foster the foreign commerce of the United States but that they would also be conducted so as not to encroach on the maintenance of a sound and effective banking structure in the United States."

In its Regulations K and M, the Board required member banks to use effective systems of records, controls, and reports that would keep banks' managements informed of the activities and condition of their branches and subsidiaries. These reports were to provide sufficient information for head offices to appraise the quality of loans and other extensions of credit, to identify the general sources of funds employed, and to be sure that internal and external audits of branches and subsidiaries conformed to auditing guidelines. Some of the Board's requirements, such as recent financial statements of borrowers and current information on borrowers' financial condition, must have been awkward for overseas branch managers who were trying to lend to non-U.S. borrowers for the first time. The American idea of divulging so much information to bankers did not catch on as rapidly overseas as blue jeans and John Wayne.

By 1974, the Board was beginning to express concern regarding the ability of the world's banking system to continue recycling OPEC surpluses to oil-importing countries. In its 1976 *Annual Report*, the Board said the increase in payments for oil to OPEC, combined with the low abilities of some members of OPEC to absorb imports, was a major cause of the 1974–75 world recession and the generally weak expansions in 1976. The *Report* pointed out that U.S. banks continued to expand their foreign lending from both their domestic offices and their foreign branches. In December 1976, the *Report* said, claims on Brazil and Mexico accounted for about one-half of total lending by U.S. banks to all non-OPEC developing countries.

In his 1977 report to Congress on the condition of the banking system, Chairman Burns said the quantum jump in oil prices had contributed to unease about the health of banking, but so had the 1974–75 recession. Major domestic business bankruptcies triggered by the recession had caused well-publicized loan losses for banks. The recession had also exposed the financial weakness of many real estate investment trusts, which were heavily indebted to banks. New York City's financial difficulties had brought to acute national consciousness the risk exposure of banks to the vicissitudes of municipal finances. With all of these domestic consequences of inflation and recession to contend with, U.S. banks had nevertheless been doing a commendable job overseas in recycling the OPEC surpluses.

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[7] For a good discussion of bank supervision and examination, see Benston (1973).

OPEC members could have become bankers on a major scale, the Chairman said, extending credit directly to the countries that were buying their oil. They had, instead, "shifted the banking opportunity—and with it, of course, the burden of credit evaluation—to others, which meant mainly the large American and European banks that the OPEC group used as depositories" (Burns 1977, p. 433). The supportive role that American and other banks played prevented financial strains from cumulating dangerously. U.S. export trade and the general economy had been helped by banks' international lending.

However, this useful role of U.S. banks' international lending raised some potential hazards. According to Chairman Burns: "Even though losses on foreign loans have been small—indeed, relatively smaller than on domestic loans—the Federal Reserve Board of Governors is concerned about the enlarged risk exposure of our banks" (p. 434).

The Chairman offered three main suggestions. First, banks should have a heightened sense of caution in managing their international loan portfolios. Second, the Board should be both helpful to banks and watchful of their activities. Part of the Board's effort would be a joint project with other central banks to learn more about the indebtedness of individual countries to banks. The Board was also making an informal survey of bank practices in defining, monitoring, and controlling risk in international lending. Third, a cooperative project should be initiated to explore financing alternatives for handling the structural payments imbalances that induced heavy bank lending to foreign countries. He thought the cooperative effort should involve, among others, official international agencies, the Group of Ten countries, OPEC, the non-oil LDCs, and the private banks.

Chairman Burns concluded his message by saying that the Board certainly did not want caution to be overdone, in the sense of making banks unresponsive to the needs of credit-worthy borrowers, either at home or abroad. Regarding the Board's role, he said (p. 436): "Nor do we as supervisors, despite our obligations to be watchful, seek to substitute our judgments for those of on-line bankers in deciding who should get credit. We have neither the capacity nor the desire to play such a role."

I have dwelt on this statement because it was an early official reaction to an eruption of unforeseen problems. It probably would still be a fair statement of the Federal Reserve's approach to the international debt problems of banks, with minor alterations to recognize the special difficulties of dealing with sovereign governments. In short, the banks must stay in the international lending business, for the sake of the general health of the U.S. and world economies, while being as careful as they can be. The Board will be helpful and watchful in its supervisory role, but the possibilities for making a major difference through supervision are limited. Significant change must be sought in another arena, international cooperation to reduce the burdens on banks by finding other ways to finance or to reduce the payments imbalances of borrowing countries.

Governor Henry Wallich (1977, p. 85) added the interesting observation a few months later that while it is important to point out problem areas in the examination process, ". . . bank regulators need to be sensitive to the fact that admonishments to banks can result in damage to the credit of borrowing countries." The Board may well have anticipated some embarrassment if a U.S. bank were to explain its rejection of a credit request from a friendly government by saying that the Federal Reserve Board did not consider the country creditworthy. Governor Wallich thought this problem in diplomacy might be overcome by having supervisors focus on the degree of country concentration of foreign loans in bank portfolios and on the quality of information possessed by banks for assessing risks attached to their international loans.

Other high U.S. officials heard from in 1977 sent the banks essentially the same rather ambiguous message: Stay in there; your country needs you. But be careful; we will be watching you. Help is on the way; governments will eventually deal with the world debt problem. Secretary of the Treasury Michael Blumenthal and Under Secretary of the Treasury for Monetary Affairs Anthony Solomon expressed some of these ideas when trying to answer the questions of anxious Congressmen and Senators. Senator Heinz (1977, p. 2), for example, opened hearings of the Senate Banking Committee by saying, ". . . these hearings should pave the way to answer the central question of how American banks can continue to make substantial loans to LDCs without exposing U.S. creditors and taxpayers to an unacceptable level of exposure and risk and how our international financial institutions may do likewise."

In comments that are particularly relevant to the subject of bank supervision, Secretary Blumenthal (1977) stressed the importance of information for risk evaluation. He predicted that borrowing countries would face increasing demands for information about their economies. Their ability and willingness to provide such data would increasingly constitute the price of admission to private capital markets, "because of the lenders' insistence in their own prudent self-interest, quite apart from any suggestions of the regulatory agencies" (p. 8). Lenders, he said, would need to develop the ability to extract the maximum benefit from this additional information; they would have to refine their capability for country analyses.

Under Secretary Solomon (1977) conceded that the growth of international debt to private lenders through the end of 1976 had been extremely large by historical standards. However, he did not think it had reached a danger point for the monetary system either in the sense of countries borrowing beyond their capacity to service debt or in the sense that our banks were overextended. Among the mitigating factors he cited was his observation that inflation had substantially reduced the burden of previously incurred debt measured in real terms. (What he thought inflation had done to the well-being of lenders was not recorded.) He also said, "Historical data on loan losses incurred through international lending by U.S. banks do not support the view that such loans jeopardize bank stability." He reported that the Acting Comptroller (who also is in the Treasury Department) had told a House Committee "that the extensive examinations his agency performs on national banks engaged in international lending did not reflect cause for serious concern. He [the Acting Comptroller] also said that the loan problems of major banks were concentrated in the real estate field and in various domestic industries." Chairman Burns had made the same point. With regard to bank supervision, Under Secretary Solomon said, "Bank supervisory agencies should continue to exercise surveillance over external lending, as they do with domestic lending, to preserve the soundness of banking systems."

Thus far, we have considered the reactions of U.S. officials to the sudden growth of international banking and international debt. These developments were viewed in other countries with confusion and some alarm as well. According to Dale (1982), techniques of supervision lagged behind the internationalization of banking through the early 1970s. Supervisors were domestically oriented within their national banking systems. Apparently, not all of them displayed the alacrity of the U.S. Comptroller of the Currency and the Federal Reserve System in deploying their supervisory forces to new fields when U.S. banks swarmed abroad. Furthermore, supervisory standards and techniques varied greatly from country to country.

The financial disturbances of 1974 raised the question of who was in charge of supervising the activities of banks operating away from their home countries. There was some fear that lack of cooperation between authorities of parent and host countries might permit some banks to escape supervision. In September 1974, therefore, central bank governors created a committee of bank supervisors to act under the auspices of the Bank for International Settlements. Members of the Committee on Bank Regulation and Supervisory Practices were to coordinate surveillance over international banking and to share ideas about how to adapt their national supervisory systems to changes in the banking environment.

Guidelines for dividing responsibilities among national authorities were approved by the Central Bank Governors of the Group of Ten in the Basle Concordat in December 1975. The Concordat included these main principles among others:

1. Parent and host authorities should be jointly responsible for supervising foreign bank establishments.
2. No foreign bank establishment should escape supervision.
3. Cooperation should include the exchange of information between host and parent authorities and the authorization of bank inspections by or on behalf of parent authorities on the territory of the host authority.

According to Peter Cooke (1981) of the Bank of England, who is Chairman of the Basle Committee on Bank Regulation, the principles for international supervisory cooperation had to be built up from virtually nothing. The events of 1973 and 1974, when a number of banks, including the Herstatt Bank, failed and others experienced serious losses, impelled central bank governors to allay concerns about the viability of the international financial system. The group's first priority was to divide up supervisory responsibilities. It decided early in its work that it would not be practical for an international body to monitor potential problems within national banking systems. That should be left to national authorities. But it agreed that supervision of international banks should be done on a consolidated basis. That is, the capital adequacy and risk exposure of international banks should be monitored on the basis of their worldwide business. This was intended to prevent banks from increasing their risk taking beyond acceptable bounds through establishing operations in countries where supervision was less stringent than in the parent country.

Like the U.S. authorities, the Basle Committee placed great stress on collecting and analyzing data on country risk. As Peter Cooke (1981) reported:

> The basic attitude of supervisors generally can be simply expressed: country risk, as one form of credit risk, is a matter for the commercial judgment and decision of each bank on a case-by-case basis. But as with all kinds of risk exposure in banks' business, the essential characteristic is that it should not be excessive in relation to a bank's capacity to meet losses. The supervisors' particular concerns should be: to assist banks to assess the risks they are running by ensuring that the best possible data bearing on the lending decisions are available; to ensure that the banks have adequate internal assessment and control procedures; and to improve prudential reporting and monitoring systems.

The International Monetary Fund did not have direct supervisory authority over private institutions in financial markets, but it obviously was keeping a close eye on them as the problems of the 1970s began to build up. While preoccupied with expanding its own lending authority in the early 1970s, the IMF took time in its annual reports to look askance at the ability of private financial markets to handle the recycling of petrodollars. For example, the 1974 *Annual Report* (pp. 26–27) said:

> Although financial markets appear to have operated reasonably well in the early stages of these flows, an immediate question is whether or not the Eurocurrency market will prove adequate over an extended period for the financing task that is envisaged. . . . Euro-banks may become increasingly reluctant to accept short-term deposits or to make new or additional investments in some countries badly in need of finance. . . .
>
> . . . If such concerns are valid, they suggest that the major industrial countries should consider possible ways and means of minimizing the hazards mentioned above and assuring the maintenance of orderly conditions in the Eurocurrency market. Although industrial countries have in the past been reluctant to coordinate their financial policies in any formal way, the exigencies of the current situation call for careful watch over the operation of international financial markets.

Other international efforts to coordinate bank supervision were organized during the 1970s in almost incestuous fashion. The Organization for Economic Cooperation and Development established a Committee on Financial Markets to bring together central bankers, finance ministry officials, bank supervisors, and banks for discussion of common concerns. This Committee, in turn, spawned an Expert Group on Banking to study, among other subjects, the scope of prudential supervision in major industrial countries.

The European Community considers harmonization of banking supervision to be an element in the creation of a common market. The EEC's First Banking Coordination Directive, adopted in 1977, provided for authorization criteria, calculation of common prudential ratios and, naturally, the establishment of an Advisory Banking Committee to assist the EEC Commission. The EEC Commission and the Advisory Board are supported in their turn by an informal club of supervisory authorities known as the Contact Group, which was established in 1971 (Dale 1982, pp. 6–7).

As late as 1982, a Group of Thirty survey of bankers' attitudes found that North American banks believed they still suffered a competitive disadvantage because of domestic regulation. The proliferation of new agencies to coordinate bank supervisory efforts abroad suggests that the American banks someday will not be able to make that complaint—unless U.S. authorities find ways to roll back the deregulation movement.

This survey of official reactions to growth of international banking and the growth of international debt during the 1970s was based on public statements. The officials' private communications to banks, as in reports of examination, might put them in a different light. But, it is difficult to find evidence in their public performance to justify the common belief that regulation of financial markets and institutions leads to superior results.

For regulation to improve the performance of portfolio managers and firms, the regulators must have either superior foresight or information not available to the people making the portfolio decisions, or both. Yet when the international debt problem we are concerned with today was in its early stages, the authorities evidently were as surprised as anyone else. So much for superior foresight. As to superior information, governments did have some information not available to everyone, information primarily concerning their own policies. They could easily have solved that problem by making clearer announcements of their policies. Furthermore, lending officers who negotiated the loans that are now questioned had information not available to any regulator, plus powerful incentives for making sound loans. Today's problems probably would not be much different if the lenders had collected and analyzed additional information on current economic and political conditions at the time they made the loans.

The regulatory authorities in the United States, foreign countries, and international agencies did not really do very much to deter banks from increasing their risk exposure in the LDCs during the 1970s. Potential risks were deplored, and bankers were advised to be prudent. Committees were formed to coordinate supervisory activities to be undertaken sometime in the indefinite future. The overwhelming concern in the minds of the authorities, however, was the role of the banks in financing the LDCs in the face of what seemed unprecedented difficulties. The authorities did not want anything to interfere with that role before the problems subsided or before alternative means of financing could be found.[8]

My conclusion about the 1970s is that the regulatory aspects of the international debt problem were not very important one way or another. The regulators, after all, were public servants in governments that had much more to worry about than the soundness of the financial system. However, regulation could become much more important in the future.

What is the Real Source of the Debt Problem?

As we consider various proposals for coping with the international debt problem, we should be aware of two potential hazards in their regulatory aspects. The first is the thickening of the supervisory blanket implied by organization of the many cooperative organizations to coordinate supervisory activities and to develop uniform standards that were discussed above. The other is the coercive element in some of the plans for remedying the debt problem.[9] Banks are faced with the prospect of having to accept the terms of negotiations conducted for them by others whether they like them or not. Both of these potential hazards boil down to reductions in the resilience of the financial system—its ability to bounce back—at a time when we are going to need all the resilience we can muster.

With regard to the first potential hazard, supervision is meant to be helpful to banks and other financial institutions. It should be helpful if one believes supervisors have superior foresight and superior information. As I suggested above, that is a highly debatable proposition.[10] Furthermore, even when supervision is innocuous, in the sense of interfering little with management discretion in financial institutions, it still absorbs management time and resources that could otherwise be used for innovating and producing financial services. The reporting requirements of supervisory agencies become more burdensome each year.[11] In responding to the international debt problem with new regulations, governments could make mistakes comparable to those U.S. legislators made in responding to the Great Depression.

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[8] It did not occur to me until I attended the Cato conference on January 20–21, 1984, that I might also have looked into the question of whether the regulators should have tried to protect LDCs against being seduced by banks into borrowing too much. I did not find any discussions of that question during the years LDC debt was building up.

[9] For discussion of some of these plans and their coercive elements, see Cline (1983, pp. 114–19).

[10] According to Benston (1973, p. 57), examiners and supervisors used to be viewed as consultants to banks, as well as auditors. "However," he says, "the period of inexperienced bankers running small unit banks is largely a thing of the past." Agreeing with my position, he also says that there does not "seem to be much evidence that examiners are better lending officers than those employed by banks, especially by larger ones."

Some recent changes in U.S. bank supervision have become more intrusive than earlier ones that were confined to seeing to it that bankers follow proper procedures in making decisions. For example, the International Lending Supervision Act of 1983 breaks new ground in seeking to strengthen international lending procedures. One of the new provisions will require U.S. banks to establish "Allocated Transfer Risk Reserves" against certain assets. In the words of a December 1983 interagency statement from the three federal supervisory agencies, these are "certain assets whose value *has been found by the agencies* to have been impaired by protracted transfer risk problems" [italics added] (Comptroller of the Currency, Federal Deposit Insurance Company, Federal Reserve Board 1983, p. 3). The questionable aspect of this requirement is that, in effect, it ties up bank capital against a specific risk that may or may not materialize. I do not want to debate the merits or demerits of this particular requirement, which was still subject to review when this was written, but merely cite it as evidence of the direction in which supervision is evolving.

The coercive elements in some of the proposals for coping with the debt problem would have more serious consequences. Suppose for example, a new agency were to be established to convert outstanding bank debts of problem borrowers into new instruments with significantly different terms than those on the original debts, and the banks were to have no say in negotiating the new terms.[12] That would be an instance of the broad definition of regulation used at the beginning of this paper, as a direct intervention influencing portfolio management decisions. It would impose a direct cost on each bank involved. But more important would be the damage done to the institutions of property rights and enforcement of contracts that underlie financial markets.

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[11] Costs of bank examination and supervision in the United States are of three main kinds. According to Benston (1973), one is the direct cost of paying and supporting field examiners and supervisory and support staff. The second is the cost to banks in providing time, space, and information to examiners and the disruption of normal activities caused by field examinations. "Third," Benston says, "is the cost of foregone opportunities to the public and the banks to the extent that supervisory agencies restrict competition among banks or inhibit the banks' efficient allocation of their resources" (p. 53).

[12] The Kenen Plan, for example, would establish a corporation to issue long-term bonds to banks in exchange for debts of developing countries at a discount of say 90 cents on the dollar. It bristles with prohibitions directed at banks. For example, "banks should not be allowed to choose the debts they discount . . ." and "banks should not be allowed to decide when they will turn to the I.D.D.C." (Kenen 1983).

Financial markets are built on complex bundles of property rights and contracts. The greatest service governments can perform for the financial system is to uphold those property rights, by enforcing contracts, and acting as an arbiter in case of disputes. Setting aside any of these rights, even in the interest of dealing with what is viewed as a great international emergency, should not be undertaken lightly. It would increase risks and thus would reduce the international and domestic private capital flows that are essential to future growth and prosperity of the world economy.[13]

The idea that additional regulation of banks and other institutions in international financial markets would contribute to solving the debt problem seems to me to be based on some fundamental misconceptions about the role of information and the nature of economic risk. As we saw in the review of how regulators reacted to the growth of international banking and international debt, the officials quoted placed great stress on the use of information by banks in their lending decisions. There seemed to be a general conclusion that if the banks had somehow collected more information, had analyzed it better, and had been persuaded to be more prudent, there would have been fewer disappointments later. Consequently, the supervisors are now gearing up to see to it that banks use more information, analyze it more carefully, and behave more prudently in the future. Governments, as processors of economic data, furthermore, are promising to supply more of it to banks.

If we put ourselves in the position of the bankers lending to LDCs in the 1970s, we should distinguish between ex ante and ex post. Ex ante—looking ahead—lenders had incentives to collect and use all of the data they could get their hands on regarding economic and political conditions that might affect the outcomes of their decisions.

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[13] If bankers can be said to be culpable about anything in the international debt situation—or perhaps gullible is a better word—it is with regard to their idea of "sovereign risk." Their faith in the role of governments as upholders of property rights and contracts within countries led them to underestimate the risk that governments themselves might set aside or modify international debt contracts unilaterally. Paul De Grauwe and Michele Fratianni (1984, p. 157), for example, say that the usual precautions taken by lenders in domestic markets, such as keeping a close eye on borrowers and prescribing penalties for undesirable borrower behavior, "do not apply to international loans because contracts cannot be enforced across national boundaries; that is, the so-called sovereign risk."

They were like a coach picking a chess team for a tournament. He could expect some of his selections to win their matches, some to tie, and a few to lose. But ex post—looking back—the actual outcome was as though halfway through the tournament the game had been changed to ice hockey. A more careful selection of chess players at the beginning would not have made much difference in the second half. The change in the world economic environment when inflation accelerated in the 1970s—twice in one decade—injected risks that could not be foreseen when bankers made their initial lending decisions.[14]

Some bankers had taken a lead from modern portfolio theory and relied on geographic diversification to cope with the risks that could be expected to arise in a random fashion among countries as governments rose or fell, crops flourished or failed, and mineral resources were discovered or exhausted. Walter Wriston (1978, p. 84), Chairman of Citicorp, for example, explained the diversification strategy in this way: "[O]ur theory is very simple. We run what we call our actuarial base, which means that we don't know where trouble will come from so we never have too much exposure anywhere, but we have some chips in every game in town."

Unfortunately, the nondiversifiable risk, or systematic risk, caused by global monetary and economic instability was so great that it swamped the benefits of geographic diversification. Global monetary and economic instability also swamped the benefits of country-risk analyses that had been aimed at doing better than simply diversifying loan portfolios.

Although governments have no monopoly on foresight or information bearing on private financial decisions, they do have a monopoly on the tools of monetary and fiscal policy. If they would turn their attention to using those tools to stabilize the world monetary and economic environment, they would contribute far more to resolving the debt problem than if they try to improve the performance of the financial system through regulation.

This still leaves the question of what the regulators should do if there are widespread, major LDC defaults before the world economy becomes more stable, or if it does not become more stable. On this question, I would recommend that the regulators take the advice of the man we honor at this conference, Robert E. Weintraub. In his study, *International Debt: Crisis and Challenge* (1983) there is a section called "The Need for Common Sense by the Bank Regulators." In it he said that it would be unrealistic to require that defaulted loans be written down to zero immediately after they go into default. Doing so would assume that the defaults would be permanent and never be corrected. He recommended, therefore, that defaulted loans should be written off over a period of years, and he saw no reason why banks should not be given the time. "Given common sense behavior by bank regulators and appropriate actions by the Federal Reserve," he said, "the collapse of our money and banking systems can be ruled out even in the event of widespread defaults by LDCs" (p. 29).

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[14] Benston (1973, p. 32) similarly attributes bank suspensions during 1930–33 to the Great Depression, which had drastically changed the financial situation from what the banks had every right to expect to prevail. "In such a time," he said, "one cannot really fault the bankers for not having conducted their affairs in the 1920s so as to be able to withstand the plague of the 1930s."

Conclusion

Additional regulation would not help resolve the world debt problem. It would merely reduce resilience in the financial system, as did the regulations imposed after the Depression. In addition, it would inhibit the ability and willingness of banks and other financial institutions to do their part in restoring the health of the world financial system.

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“REGULATORY ASPECTS OF THE WORLD DEBT PROBLEM”: A COMMENT

H. Robert Heller

Introduction

The current international debt service crisis did not originate in the international banking system. It had other causes. To increase international banking regulations to alleviate the current crisis is, therefore, inappropriate. It amounts to shooting the messenger who carries the bad news.

In addition to commenting upon the paper by Mr. Meigs,[1] I would like to address the question of whether international regulatory reform is desirable in its own right, apart from the current crisis atmosphere. In particular, I will examine whether reform of the current regulatory framework would contribute to greater efficiency, prudence, and equity.

The key question of whether more regulation in international banking would contribute to a solution of the international debt crisis has been answered straightforwardly by Jim Meigs. He argues that additional regulation would reduce the resilience of the international banking system and would, therefore, inhibit the ability of financial institutions to respond to the difficult challenges before us. I agree with his basic conclusion.

Mr. Meigs has done an excellent job of documenting the failure of policy makers and regulatory authorities to foresee the present debt crisis. He draws the conclusion that giving greater power to the regulatory authorities would do little to forestall a repetition of similar problems. I would like to go one step further and argue that the

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[1] A. James Meigs, “Regulatory Aspects of the World Debt Problem,” *Cato Journal* 4 (Spring/Summer 1984): 105–24.

authorities in various countries actually contributed to the economic and financial difficulties that the world experienced in the early 1980s. Rather than ameliorating the international debt problems, the authorities, I believe, unwittingly contributed to the emergence of the problems.

Of course, bankers made mistakes as well; otherwise, they would not have their current collection difficulties. But these mistakes did not *cause* the crisis. Instead, one may argue that overlending by banks helped to *postpone* the crisis. If banks had lent less, the LDCs might have gotten into difficulty in 1979 or 1980 instead of 1982 and 1983.

The Causes of the Debt Crisis

The current situation in the international financial markets is drastically different from that of the mid-1970s, when international financial shock waves emanated from the collapse of the Bankhaus Herstatt and several other banks. These difficulties had their origin in internal problems of bank management that might have been avoided if the supervisory authorities had exercised closer surveillance over the activities of the banks involved. In contrast, most of the existing international financial problems had their origin in the governmental policy decisions made in three different arenas. First, the two rounds of increases in the official price of OPEC oil triggered much of the current international economic and financial instability. Second, the policy response in the industrialized countries added to uncertainty in domestic and international financial markets. Third, the policy makers in many of the LDC debtor countries pursued economic and financial policies that were not sustainable and that worsened their own debt service problems.

The two rounds of oil-price increases brought about the largest international financial imbalances the world has ever experienced. After the first round, the current-account surplus of the OPEC countries reached $68 billion, and after the second round, it peaked at $115 billion. Consequently, the OPEC countries amassed large financial surpluses that had their counterpart in huge deficits in the developing countries.

The policy responses by the key industrialized countries to the two oil-price shocks differed considerably. After the first round of oil price increases, an expansionary policy of increased governmental spending and an accommodative monetary policy caused a surge in global inflation rates. Credit was plentiful and inflation-adjusted real interest rates were very low, at times even negative.

After the second round of price increases, the fight against inflation was accorded top priority and real interest rates surged to record levels. Large governmental deficits in the key industrialized countries also contributed to making credit more expensive to obtain. The already heavily indebted developing countries were hit by a drastic increase in interest rates that accelerated their debt service obligations at a time when their export prices and volumes declined sharply due to the recession in the industrialized countries.

During the 1970s, after the first oil shock, the most dynamic developing countries had been highly successful in obtaining external funds to fuel their expansionary policies at very low real interest rates. Many of these countries failed to recognize that the same development policies were unsustainable in an environment of high real interest rates. Consequently, they were slow to adjust their official policies and thereby contributed to an intensification of their own debt service problems.

Throughout this period, the international banking system continued to play a vital role as a financial intermediary. No other institutions were equal to the task of recycling hundreds of billions of dollars from the surplus to the deficit countries. Mr. Meigs has documented in detail how governmental officials encouraged this process. But as an increasing number of the debtor countries got into financial difficulties, the international banking system—after initially acting as a shock absorber—began to transmit the financial impulses and distress signals emanating from the debtor countries. In the process, banks accumulated large arrearages and many loans had to be rescheduled. As a result, there have been calls for increased regulation of the international banking system.

The Desirability of Increased Regulation

The international banking system coped rather well with the payment difficulties of its key debtor countries. No major bank failures occurred. The international institutional framework also coped well, and proved to be highly resilient. The Bank for International Settlements and its member banks provided initial *liquidity* assistance; the International Monetary Fund helped in the design and financing of appropriate *policy adjustments;* and the World Bank has begun the task of helping to *restructure* the badly shaken economies by working on the supply side.

The immediate crisis has been managed well. But it is appropriate to examine the need for increased regulation of the international banking system from a long-term perspective, independent of the current crisis atmosphere. In particular, three questions must be answered to assess the need for increased regulation:

1. Would further regulation increase economic efficiency?
2. Would it enhance the safety of the international financial system?
3. Would it result in a more equitable international banking system?

Economic efficiency would probably not be increased by additional regulations. Each additional regulation places one more obstacle in the path of a free flow of economic and financial resources. Mr. Meigs argues very convincingly that additional layers of bureaucracy will not contribute to economic efficiency.

Prudential considerations are generally in the forefront of regulatory concerns. Clearly, a certain amount of supervision of financial institutions is desirable to eliminate fraud and deception. But beyond that, as Mr. Meigs points out, many of the regulatory activities are often counterproductive.

Let me illustrate by a contemporary example. The new capital-adequacy provisions for U.S. banks require a uniform ratio of 5 percent of capital against all outstanding assets. This ratio is to be applied regardless of the riskiness of the assets against which this capital is to be maintained. That is, the new regulation requires that every $100 in assets on the books of the bank be backed by $5 in capital. But clearly, very safe assets—such as U.S. Treasury bills and loans to the most credit-worthy borrowers, as well as interbank loans to the best banks—will not offer high enough margins to attract the additional capital required. While such assets might increase the earnings of a bank, they might not justify the additional capital costs. Consequently, bankers might be encouraged by the new regulation to deploy their funds in higher yielding, but also more risky, asset categories. The outcome of this regulation, which was designed to enhance bank safety, might actually be more risky asset portfolios.

In addition, the consequences of this regulation for the liquidity of the Eurodollar market have probably not been thoroughly considered. Interbank deposits constitute a major source of dollar liquidity for non-U.S. banks. As American banks find interbank placements yielding 10 or 20 basis points no longer attractive due to the new capital requirements, an important source of liquidity for offshore Eurobanks has begun to dry up. Consequently, the institutional structure of these important international financial markets might be weakened. This again is a result of new regulations presumably designed to enhance the safety of the banks and the banking system.

One could cite other examples of conflicting and counterproductive governmental rules. While supervisors are often calling for increased reserves, the Internal Revenue Service will not permit banks to set aside more than 1 percent of their assets as general loan-loss reserves. While some prudential regulation is necessary and desirable, the secondary impact of the regulations should be carefully considered before new proposals are implemented.

Finally, there is the question of equity in international banking regulation. The Cooke Committee of the Bank for International Settlements has done much useful work in trying to develop internationally acceptable and equitable rules to guide supervision and regulation. These rules have eliminated some of the cracks in the system. But the Ambrosiano incident shows that it is difficult to take account of all eventualities beforehand. A flexible and pragmatic approach is clearly needed, rather than volumes of new regulations.

In considering the need for new regulations, it is useful to keep in mind the distinction between risk and uncertainty that was first introduced by Frank Knight and was recently applied to international banking by Professors Guttentag and Herring. Risk management of assets with known probability distributions of default is what bankers are trained to do. Coping with uncertainty introduced by unforeseen and perhaps unforeseeable changes in economic policy or with catastrophic natural disasters is a much more difficult task. It is appropriately delegated to the institutions designed to cope with such problems. These institutions include national lenders of last resort, such as the Federal Reserve, and the IMF as an international source of emergency funding.

Conclusion

In conclusion, I would argue that new rules and regulations will do little to improve the ordinary risk-management function of the banks and that coping with unforseeable uncertainties is best left to the ad hoc crisis management of our national and international institutions that have served us well in the current crisis.

It took us almost half a century to dismantle some of the unnecessary regulations imposed upon the domestic U.S. banking system that were enacted in response to the emergency situation encountered in the 1930s. Let us not repeat that mistake and shackle American international financial institutions with new rules and regulations in response to a temporary crisis that was not even caused by a failure of the international banking system.

RESTORING CREDIBILITY TO INTERNATIONAL LENDING

Jerry L. Jordan

Who Will Bear the Losses?

Part of the problem of restoring credibility to international lending boils down to resolving, and making it explicit and final, who has incurred the losses that already have occurred. Somebody has lost. Somebody is poorer. The debate over the IMF quotas was a matter of haggling over who was going to publicly confess that they made a mistake and that a loss has occurred. The big international lending institutions in the West have been resisting having to tell their shareholders that they made a mistake. The government officials in debtor countries have been resisting having to tell their citizens that they made a mistake. In many cases, the present management of the banks and the present government officials are not the same as the ones who got us into this mess. But that does not seem to help very much.

Getting from where we are today to a resolution of who is, in fact, going to bear the losses is the key to restoring credibility to international lending. In making this decision, there are three basic options:

1. Austerity measures could be imposed on debtor countries, possibly under IMF conditionality agreements. This would mean that present and future consumers in the debtor countries are going to be worse off than otherwise.
2. The debtor countries could overtly default; that is, they could repudiate their outstanding debt. This would mean that the stockholders of the lending institutions must recognize that they are worse off than otherwise.

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3. In the event that less developed countries default on their external debts, the governments of creditor countries could devise ways to socialize the losses. This would mean that the taxpayers of the creditor nations (especially U.S. taxpayers) would be forced to bear the losses.

Aggregative Versus Distributive Effects

The prospect of an international financial crisis raises the possibility that everyone will be made worse off. To understand the issues and analyze the alternatives, we should separate the "aggregative effects"—the effects on economic growth—from the "distributive effects"—the effects on the distribution of real income. In a very basic way, aggregative issues are concerned with the size of the pie, or more precisely, with how rapidly the size increases over time, while distributive issues are concerned with who gets how big a piece of pie at any point in time. In the context of the international debt problem, the issue boils down to the following. Suppose we knew for certain that the total real output of all of the countries involved was going to increase at the same rate, regardless of the ultimate resolution of the international debt crisis. Then, whether or not the IMF quota was increased, whether or not there were defaults by some countries, or whether or not there were write-downs of the face value of international loans by the lending institutions, there would be no effect on real output.

If we knew that output was going to increase at the same rate, no matter what happened on the financial side of things, there would be no aggregative issues, but only distributive issues. In other words, we would be arguing over *shares* of the pie, not over the *size* of the pie. However, to the extent that the international debt problem could result in a financial crisis that caused a contraction in aggregate output of the countries involved, the standards of living of citizens of both developed industrialized countries and the less developed debtor countries could decline, something similar to the Great Depression of the 1930s. Many commentators have focused on the probability of an international financial crisis resulting in a contraction in world output. They also have discussed the types of policies that would be appropriate to prevent a debt crisis from lowering living standards in *both* creditor and debtor countries.

If we could insulate the growth of world output from any financial crisis, then we could focus on the pure distributive effects of different solutions to the current set of international debt problems. It should be abundantly clear that somebody has incurred a loss. From the time of the first oil shock in 1973 and 1974, it has been obvious that there have been distributive effects of the relative price changes of internationally traded commodities. In the first instance, the quadrupling of oil prices in 1974 meant that the oil-importing and consuming countries were worse off, in a present-value sense, while the oil-producing and exporting countries were better off. In other words, there was a redistribution of wealth from some countries (or the citizens of some countries) in favor of other countries.

The Available Options

Once policy makers in the oil-importing and consuming countries recognized what was happening in 1974, they concluded that there were basically two choices available to them. They could either reduce their living standards *immediately* or they could borrow and reduce their living standards in the *future,* as they repaid the loans. Some countries, such as Korea, Taiwan, and Japan appear to have taken the first path and decided to tighten their belts. Other countries chose the second path and have decided to borrow heavily on the international financial markets in order to pay for oil and other imports in the short run. In doing so, they hope to maintain their current consumption levels as much as possible, or even increase them, and therefore to create a situation where the wealth loss is shifted into the future. In other words, the recycling of petrodollars has made it possible for governments of oil-importing and borrowing countries to shift part of the wealth loss implied by the first oil shock into the future.

The problems created by the initial world energy crisis in 1973–74 were serious enough, but the second oil shock in 1979 and 1980 further exacerbated the problems and ultimately created a condition in which very hard choices became inevitable. The wealth loss (in a present value or actuarial sense) that initially resulted from the quadrupling (and subsequent doubling) of international petroleum prices was very apparent. The recycling of the international flows of funds meant that a point would come in which political demagogues in the borrowing countries might find it useful to focus on the debt servicing problems of their countries and claim that it was the international lending institutions—the big banks of the developed countries in the West—that were exploiting the citizens of the lesser-developed borrowing countries. Even if politicians in the oil-importing debtor countries realized that higher energy prices meant a reduction of living standards, it was not obvious that it would be in their self-interest to blame OPEC. It has become much more convenient to claim that the large international lending institutions were the ones exploiting the less developed borrowing countries—demanding interest on the outstanding debts of LDCs as well as repayment of principal, and requiring payments that were a rising share of the export earnings of those countries.

If the political leaders of the less developed borrowing countries were successful in creating the perception that it was the *lenders* who were exploiting them and causing the problem, then it would be more tempting to default on the loans and shift the losses to the shareholders of the international lending institutions. The big lending banks of the Western industrialized countries understand this very well and are working through their own governments and the IMF to try to impose policies on the less developed borrowing countries that would ensure that these losses are in fact borne by the citizens of the borrowing countries.

In domestic lending, everyone understands that if you borrow a lot of money and throw a big party, it might be fun in the short run. However, in the long run, it will mean a decrease in your real standard of living as the debts are paid off. If you are not able to pay your debt, then you declare bankruptcy and the lenders must bear a loss as a result of having made it possible for you to throw the party at an earlier time. Naturally though, the lending institutions are going to try to minimize their losses by attaching or acquiring all of your assets, and the borrower who has defaulted will find it very difficult to repeat the credit-financed party in the future.

In international lending, it does not work quite the same way. It is very difficult for lending institutions of foreign countries to put liens on or to acquire and possibly transport assets that they have repossessed from the borrowers. If the borrower can prevent the lender from repossessing the assets, then the loss incurred by the lender is going to be relatively greater, while the loss incurred by the borrower is going to be smaller, than in the case of domestic lending. Obviously, if it were made more difficult or impossible for a lending institution to repossess a car or a house when the borrower could not make his payments, the lenders would be less willing to make this kind of loan in the future. In effect, default by the governments of less developed borrowing countries would be very similar to a "debtors' holiday" in domestic lending where "the slates are wiped clean" at a point in time. Everyone promises not to do it again, but the action by government imposes the loss on the lenders rather than on the borrowers.

Methods of Paying Off the Debt

Let us take a look at some fundamental relationships. So long as the internal real growth rate of a borrowing country exceeds the external real borrowing costs (that is, the real rate of interest on the currency being borrowed or in which the debt is denominated), then (theoretically) there is no limit to the amount of debt that can be serviced by the borrowing country. Relatively high internal rates of real growth mean that potential export earnings will always be sufficient to pay interest on and repay principal of externally borrowed funds. However, if the internal real rate of growth falls below the external real borrowing cost, then on a present-value or actuarial basis the outstanding amount of foreign debt cannot be repaid in full without reducing domestic consumption. If this situation persists, then there will be a continuous contraction in domestic standards of living.

There are essentially two ways to pay off outstanding debts. One is the "gradual, over-time" approach, and the second is the "all at once" settling of obligations. In the context of international debts, the first method amounts to remitting to international lenders the proceeds of export earnings over an extended period of time until the debt is finally eliminated. The second method amounts to turning the title to assets over to lenders, so they can earn what they can or can dispose of the assets on the market for whatever they can get. This second method of settling debts occurs in a domestic context only when bankruptcy is declared by the borrower. Lenders must make the judgment as to whether the present value of a loan is greatest if the original borrower continues to operate the enterprise, or if the lender takes over and manages the enterprise, or if the assets are acquired and sold on the market for whatever some third party thinks they are worth.

There are obvious complications in applying this analysis to international lending, especially when the borrower is a foreign government or state-owned enterprise. If a loan has been made to a government and is to be repaid by collecting taxes from that country's citizens, there is not much the foreign lender can do. The loan, representing a claim on foreign taxpayers, could be sold on the market for whatever it will bring, or the original lender can simply hold on to the claim and accept whatever payments are forthcoming.

It is interesting to note that when foreigners lend to the U.S. government (by buying Uncle Sam's bonds), the decline in the value of such loans as a result of adverse U.S. economic policies cannot be ignored. However, the loans by U.S. citizens or banks (or those of any other Western country) to a less developed country are not "marked to market" as it becomes apparent that the real economic value of such loans is declining.

I suspect that there were cases in the 1970s in which so-called special issues of nonmarketable U.S. government debt were held by foreign governments or central banks at "par" value even though the price of marketable U.S. government debt was declining significantly. The foreign government or central bank was reluctant to write down the value of an international reserve asset and acknowledge that a loss had been incurred. Failing to reduce the value of assets on the books, however, does not mean that a loss has not occurred.

Involuntary Lending

From the standpoint of restoring credibility to international lending, the most adverse development in the 1982–83 period is what is referred to as "involuntary lending." Such coercive use of the powers of government should be rejected on principle in a free society. U.S. Constitutional protection against the "taking of property" should mean that a financial institution cannot be forced by government to make loans to anyone or on terms contrary to the judgment of management.

The rationalization for involuntary lending is that there is some "market failure" and a "free-rider problem" in international lending. Several points need to be made. First, the burden of proof is on those who make such assertions. There is no evidence of a market failure or free-rider problem in international lending any more than in domestic lending. Syndicate leaders in international lending earn a fee for bearing a risk and "making a market," as do domestic security underwriters. Having underestimated the risk and set too low of a fee in the past does not justify the use of force to require others to continue lending.

The holders of the certificates of deposit (CDs) of a bank that gets into trouble—such as Franklin National Bank—cannot be forced to renew and add to their holdings of CDs, even if a free-rider problem is asserted. The holders of the commercial paper of a large corporation cannot be forced to continue to lend to a company that gets into financial difficulty. Forcing a relatively small regional bank to continue to lend to Argentina or Poland would be no different than forcing them to continue to lend to W. T. Grants, Penn Central, or Penn Square.

Furthermore, many banks felt they were incurring little risk in their international lending because the loans were all "short term." But the phenomenon of government-orchestrated involuntary lending has resulted in all those loans becoming long term even though they mature frequently. The original pricing of what were thought to be short-term loans would have been different if the lenders had anticipated that they would be forced to make the loans on a long-term basis. A present-value loss has been imposed on the lenders. They will be less likely to make that mistake again in the future. The pricing of short-term loans in the future will reflect the possibility that the lender will be coerced into renewing or extending the loan.

Another development in the past two years that is to be regretted is the failure of banks to begin writing down international loans to their expected actual value. There is no justification for international loans to be treated differently than domestic loans in the provision of reserves against losses or the classification of the status of the loans. The banks' boards of directors have a responsibility to see that managements accurately and honestly report the status of all the banks' assets.

Credibility of Lending Means Credibility of Economic Policies

The credibility or viability of the underlying economic activity that is financed by debt determines the soundness of the loan. In domestic lending, credit risk means, Can the borrower pay us back? Banks do not lend to businesses that are expected to lose money. In lending to foreign governments or state-owned enterprises, however, there is no similar assessment of credit risk. The country's taxpayers, rather than company earnings, are viewed as the ultimate source of debt service.

Banks have financed the construction of state-owned or subsidized steel mills, automobile factories, and other projects, where there was no reason to believe the country had a natural comparative advantage. That means the banks were financing economic losers. Wherever the borrowing country distorts its exchange rate, or maintains different exchange rates for private, commercial, and financial transactions, it is likely that the foreign lenders are supporting an uneconomic use of the borrowing country's resources. Wherever there are market-distorting import-substitution policies, subsidies to exporters, onerous tariffs on imports, credit subsidies, or other interferences with the price and profit signals from international and domestic markets, a misallocation of resources is occurring. The resulting reduced growth or stagnation in the borrowing country means the taxpayers and consumers of that country are going to bear part of the burden of servicing the foreign debts.

In the past, there was a bias (at least on the part of mid-sized regional banks) toward lending to foreign governments or government-owned enterprises, rather than to the foreign private sector. The rationale was that a country could not go broke. Such logic often meant that it was preferable to lend in countries where there was a strong authoritarian regime, rather than a democracy or a weak dictatorship. If the lender expects the borrowing country's consumers and taxpayers to ultimately bear any losses, a nondemocratic political system will be more attractive to the lender.

Perverse Policies of Lending Countries

Since the ability to pay interest and repay principal on foreign borrowing depends on the ability to export (unless foreign private equity capital inflows are used to pay debts), the major industrialized countries have a responsibility to preserve open markets for internationally traded goods. It is hypocrisy for the governments of the European Common Market, Japan, and North America to restrict imports from the less developed debtor countries while professing to search for a solution to the international debt problems. Some agencies of the U.S. government want to force banks to continue lending to Mexico while other agencies want to limit imports of Mexican lettuce, tomatoes, manufactured goods, and other products. The Common Market countries heavily subsidize their own agriculture while chastizing Latin American countries for not being able to earn more foreign currencies to pay their bills. If the Philippines could sell more bananas, pineapples, meat, and wood products to Japan, their debt burden would not be a problem.

Conclusion

The willingness of creditors to lend in the future and debtors to borrow in the future will be influenced by the ultimate resolution of the inherited international debt problems. Either the supply of international credit or the demand for it will be affected, unless the taxpayers of lending countries are forced to bear the losses. To the extent that present and/or future consumers of debtor countries bear the losses, international *borrowing* will not be so attractive in the future. To the extent that shareholders of lending institutions bear the losses, international *lending* will not be so attractive in the future. But to the extent that taxpayers in industrialized countries bear the losses, a new form of international welfare program will have emerged.

The rise in protectionist sentiment in the United States and other major industrialized countries is a threat to international trade and, therefore, to international lending. Misplaced emphasis on export promotion programs of industrialized countries in the mistaken belief that such programs will "create jobs" is detrimental to the debtor countries. Past lending to inefficient state-owned or subsidized enterprises, or to government infrastructure projects where there is no revenue generated, imply that the borrowing country's taxpayers and consumers must pay the bill. Future lending should be based on the economic viability of the activity that is being financed. This is the only sure way of restoring credibility to international lending.

Finally, one other element of restoring confidence to the whole system of international lending should be mentioned. It would involve assuring everyone that the United States will not continue with its highly erratic stop-and-go monetary policies, and that it will begin to put its fiscal house in order. If we do not solve these problems, then the rest of the world has little chance of working out its problems.

"RESTORING CREDIBILITY TO INTERNATIONAL LENDING": A COMMENT

William R. Cline

The problem that Jerry Jordan (1984) deals with—restoring credibility to international lending—is of critical importance. Its most graphic illustration, perhaps, is in figures on the exposure of the banks to the developing countries, Eastern Europe, and some of the OPEC countries, which amounts to 280 percent of their capital. It does not take too much imagination to see the kinds of problems we can get into if that debt is seriously eroded or collapses. In my opinion, confidence in international lending and the financial system will be restored by the processes of international economic recovery which we are already witnessing.

Some Projections

In order to analyze the severity of the debt problem, I developed a projection model for the 19 largest debtor countries (Cline 1983). The model forecasts these debtor countries' exports, their balance of payments, and other key economic variables through 1986. Their exports are related to OECD growth, both in terms of volume and in terms of the prices of their exports, and to their own exchange rates. Their imports are determined by their own domestic growth rates and by their exchange rates. Interest is determined by the level of international interest rates, and dollar prices in world trade are determined by the dollar's strength. Under the model's basic assumptions, which are more or less being realized at the present time, one sees favorable projections for resolving our current world debt problems.

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Given the basic assumptions of 3 percent growth in the OECD countries from 1983 through 1986, a LIBOR (London Interbank Offered Rate) on the order of 10 percent in this period, oil prices more or less constant at $29 per barrel, and a depreciation of the dollar by 15 percent, the model leads to the following projections. The current account deficits of the 19 largest debtor countries will decline from 24 percent of their exports to 14 percent. Their overall ratio of debt to exports will decline from 190 percent to about 160 percent. Some of the trends for some of the key debtor countries are even more impressive. The debt-export ratio for Brazil can come down from 380 to 200 percent; for Mexico, from 275 to 230 percent; and for Argentina, from 370 to 180 percent. The projections find serious deterioration only in some of the oil-exporting countries, because of stagnant oil prices. Even in some of these countries, however, there have already been some sharp adjustments. For example, in 1983 Venezuela had a strong current account surplus, although that obviously involved sharp import restrictions.

An Illiquidity Problem

These projections indicate that the debt problem is one of illiquidity, not one of insolvency; that we will see a recovery through the normal processes of international economic recovery; and that we will see exports growing faster than the interest rate. This analysis is not unique; there is a similar analysis for Latin America published in the autumn 1983 issue of the Federal Reserve Bank of New York's *Quarterly Review*. And similar analyses appear elsewhere. On the basis of this kind of analysis, it seems to me that Jerry Jordan's premise that there will be massive losses and that the only question is how they will be divided, is very doubtful. In particular, this type of analysis indicates that the current strategy is the right one and that it is correctly premised on an illiquidity diagnosis of the world debt problem. Our model does imply that we have to achieve a certain rate of international economic recovery. If we go to lower levels of international growth, say, 2 percent for the 1983–86 period, or if interest rates escalate once again to 15 percent, then one does not see the improvement, and we are much closer to an insolvency problem.

Economic performance in 1983 has been favorable to the model's assumptions. In the case of my own projections, the actual current account deficits of the 19 debtor countries were only about half as large as I projected for 1983, so performance is ahead of schedule. In Mexico, which had a $12 million deficit in 1981, the deficit was supposed to be $3 billion in 1983; instead, Mexico had a current account surplus of $5.5 billion. This overperformance obviously came at the expense of a sharp cut in imports and a serious decline in Mexico's growth rate. Argentina, Brazil, and Mexico together have shifted from a trade deficit of $3 billion in 1981 to a combined trade surplus of over $20 billion in 1983. We are seeing adjustment, but the dynamics of the adjustment process take time, so we should not expect these countries to instantaneously return to credit-worthiness. Statistical analysis of debt indicators suggest that even with these kinds of improvements it will be 1986 before we see the kinds of returns to credit-worthiness that would permit a return to voluntary lending.

The Adjustment Mechanisms

In my opinion, the adjustment mechanisms that would take us from here to there, would be very much the mechanisms we have seen in place so far. They involve official cooperation and what I call "involuntary lending." Involuntary lending, I would submit, would happen even without the IMF, the Federal Reserve, and the Bank of England. It would happen because the banking system has its own incentive to make these loans. The incentive works as follows. The moderate amount of increased exposure is sufficient to avoid default; therefore by making these moderate expansions of exposure, the banks are securing the large exposure that they have outstanding already. The problem of free-riders and the involuntary aspects that Jordan was referring to, have to do with the fact that the small banks, when they make their calculations, think that their own actions cannot affect the probability of default, even though in the aggregate they can. Consequently, there is a role for a unifying agent, such as the IMF, to help coordinate the actions of individual banks across countries. Even if the existing official international lending agencies were dissolved tomorrow, the banks would find it in their cooperative interest to have an institution like the IMF.

The existing system of international cooperation has been much more robust than many people anticipated. Even one year after the Brazilian crisis, we have seen the almost complete success in the mobilization of its second jumbo loan (of $6.5 billion) from the banks. This would not have occurred if the only incentive in the whole process had been Paul Volcker talking to the regional banks. I disagree that involuntary lending is an unacceptable intrusion by the state into private affairs. I think it is a matter of self-interest for the banks, and I see it as being a fairly robust mechanism that will continue the lending until the point where we get to voluntary lending.

What about voluntary lending? My calculations indicate that deficits should come down sufficiently by 1986–87, so that it would be possible even for plausible amounts of expansion of exposure for the large banks to finance not only the deficits but in addition the orderly withdrawal on an amortization basis of some of the small banks accounting for up to 30 percent of the exposure. So I think we can envision a return to voluntary lending.

What about policy? There are many areas of policy. We have just focused on some that are of special concern. In this whole process of adjusting to the debt crisis, we have seen a tremendous amount of emphasis on the issue of whether the government ought to be involved; in particular, whether there should be IMF activity. In my opinion, the decision to increase the IMF quotas last year (in 1983) was the right decision. Failure to do so would have prompted countries to lean further in the direction of default. It is interesting that already the calculus of default has shifted in favor of default because, whereas the new borrowing used to be three times as large as the interest being paid, it is now true that the interest being paid exceeds the new borrowing. Jordan, no doubt, would push the calculus even further in the direction of default. The IMF has been pushing banks to lend more. Was it the banks' irresponsibility that caused the problem? If you look at the numbers from 1973 to 1982, the debt owed by non-oil developing countries rose by $500 billion. You can account for $400 billion of that through international economic shocks: Higher oil prices, above the general rate of inflation, accounted for about $260 billion; about $40 billion can be attributed to real interest rates above their historic averages in 1981 and 1982; about $80 billion to terms of trade loss; and the remainder to other shocks.

What about the question of whether the whole strategy is "digging us in deeper?" I have heard some economists say that the strategy now is making the prospective losses worse by digging us in deeper, and that the IMF, in particular, encourages banks to lend more, and that this is dangerous. I think what is being missed here is that the banks are digging themselves out, not digging themselves in. Because they are expanding their exposure at less than the interest rate, the real present discounted value of their exposure is declining, not rising. How about the IMF subsidies? Is it not awful that the IMF is subsidizing loans to developing countries? The subsidy involved in the IMF quota increase is $200 million a year. I would submit that this amount of investment in international financial security is well spent. This seems especially true in light of the fact that the amount of damage done to developing countries' economies by distorted U.S. macro policies, in particular the mismatch between loose fiscal and tight monetary policy in 1981–82, is many many times that magnitude.

There is the issue of bank regulations: Is it not time to "mark to market?" Let us carry these loans at what they are worth. The difficulty, of course, it that it is a little hard to tell what they are worth. The market is pretty thin. The principle that you do not revalue what is on the banks' books every week if the market fluctuates, or even every year, has been with us since the 1930s. If we did, then the 8 percent bonds that mature in the year 2000 would have to be written down very severely. It is not my perception that there is a different treatment between international and domestic loans in this regard. To suddenly force marking to market in the midst of a period of financial stress would be destabilizing rather than productive. I would suggest that what we do need is a more liberal tax treatment of provisioning. We see that the German banks in particular have set aside much larger reserves than the U.S. banks, and this is driven primarily because of the liberal tax treatment in Germany which encourages the use of so-called hidden reserves. Our tax treatment limits the amount of provisioning that can be deducted to 0.6 percent of assets.

What about the attitude that the government should keep its hands off all of this. If the big banks collapse—Citibank, Morgan Guaranty—no problem. If it came to that, we could probably survive. But what is misleading is the implication that because this might be a possibility, it would be a wise thing to follow policies that increase the probability of Citibank and Morgan Guaranty becoming insolvent. An interesting figure is that the nine largest banks have about $200 billion in uninsured deposits. That is a lot of money to suddenly be lost. Institutionally, even the staunchest advocates of free markets would accept the presence of adjustment lags. If you one day have a collapse of a major bank, or shall we say the 10 largest banks, you do not the next day suddenly have institutions which replace them.

Conclusion

One should be very careful about what kind of a price one is prepared to pay for the ideological appeal of absolute nonintervention. Broader policy concerns do turn on the appropriate macro policy. The debt problem is being seriously aggravated by high international interest rates and by a strong dollar which reduces the dollar prices of traded goods relative to the debt denominated in dollars. U.S. policies have to change in order to reduce these strains. We need a lower budget deficit to reduce interest rates and to bring the dollar back to a more realistic level.

The basic strategy on debt so far has been working. It has involved adjustments and efforts on the part of all of the key players. It is not the time to go to a new international agency, which would buy up the debt with public monies. Nor is it the time to declare that all public institutions must keep their hands off completely, that there should be no insurance in the system, and that the big banks should be allowed to fail. Instead, it seems to me, that with international recovery we will see confidence and credibility restored to the international financial system.

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THE POLITICAL ECONOMY OF INTERNATIONAL LENDING

Paul De Grauwe and Michele Fratianni

The Issues in Review

The outstanding level of external debt of non-oil developing countries raises problems of collective action on the part of lenders. To begin with, there is the issue of the appropriate action to ensure the stability of the international banking system. For that we argue that the Federal Reserve System must be ready to extend the lender-of-last-resort service to *all* banks, domestic and non-domestic, transacting in U.S. dollars. But even without immediate danger of a global dollar liquidity crisis, what is the optimal response of lenders as a group? The international banking system can be likened to a club whose cohesiveness depends on one or a few members having the dominant share of benefits and costs. The United States remains the leader of this club, which faces three challenges: moral hazard, adverse selection, and free-riding. The existence of these problems gives lenders incentives to take collective action.

A significant part of the outstanding international debt should be classified as bad loans, for it is unlikely that dollar real interest rates will return to the low levels of the 1970s. On the other hand, since 1980 these real rates of interest have been unusually high and have prompted undue pessimism about the capacity of borrowers to repay their debts. International bankers will find it in their own self-interest to lend new funds to some debtor countries to ensure that they can ride out the period of unusually high real interest rates.

Finally, within each lending country the interests of different groups—banks, government agencies, and taxpayers—diverge on how

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to cope with the "insolvency" of some debtor countries. The high concentration of troubled loans among a small number of U.S. banks makes it likely that these banks will engage in collective action aimed at shifting their losses onto taxpayers.

Measure of the Problem

While it is not our task to investigate the ultimate causes of the present size of the external debt of the non-oil developing countries (NODCs), we find it useful to start our study with their proximate causes. Table 1 reports the current-account balances for three groups of countries for the period 1973–83. The table highlights the large current-account deficits of NODCs and the pronounced negative correlation between OPEC countries and NODC balances. Industrial countries, on the other hand, adjusted rather well to the two oil shocks of the seventies. In sum, current-account deficits were and remain an important source of the growth of the external debt of the NODCs.[1]

A current-account deficit denotes an excess of spending over income. This excess need not be financed by more debt. Countries, like firms, can use more than one financial instrument to attract capital. Equity is a substitute for debt; decreases in international reserves are another substitute for more debt. The distribution of equity capital across countries is influenced by relative real rates of return adjusted for risk. In the inflationary environment of the 1970s, fiscal and monetary policies in some of the high-debt countries raised the rate of inflation above the worldwide average, thus inducing a flight of capital and hoarding of foreign monies. Consequently, debt became an increasingly important means to finance current-account deficits. Low and at times negative real rates of return on debt further encouraged countries to raise their outstanding debt relative to other sources of financing.

Table 2 bears on the considerations just made. Transfer payments and other capital flows that did not affect the net debt position of the NODCs augmented the size of the current-account deficits, but not proportionately. Monetary authorities, on the other hand, accumulated foreign reserve assets (see first row of Table 2). The bulk of the financing was met through external official and private borrowings. These amounted to 101 percent of the current-account deficits in

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[1] The sizeable statistical discrepancy shown in the last row of Table 1 complicates the interpretation of current-account balances across countries. To the extent that a large portion of this discrepancy represents a reduction in the current-account deficits of the NODCs, the importance of these deficits in explaining the growth of debt is diminished.

TABLE 1

CURRENT-ACCOUNT BALANCES
(Billions of U.S. Dollars)

	1973	1974–76	1977–78	1979–81	1983[a]
Industrial Countries	20.3	9.5	30.5	– 45.1	16.0
OPEC Countries	6.7	144.0	32.4	247.9	–27.0
Non-Oil Developing Countries	–11.3	–115.9	–70.2	–257.7	–68.0
Statistical Discrepancy	15.7	37.6	–7.3	–54.9	–79.0

[a] Projected figures.

SOURCE: International Monetary Fund, *World Economic Outlook*, May 1983, Table B15.

TABLE 2

CURRENT-ACCOUNT FINANCING OF NON-OIL DEVELOPING COUNTRIES
(Billions of U.S. Dollars)[a]

	1973	1974–76	1977–78	1979–81	1983[b]
Reduction in Reserves[c]	−10.4 (−.92)	−14.0 (−.12)	−29.9 (−.42)	−19.2 (−.07)	−7.2 (−.10)
Non-Debt-Creating Flows, Net	10.3 (.91)	39.0 (.34)	32.3 (.46)	76.0 (.29)	24.2 (.35)
Official Long-Term Capital, Net	4.9 (.43)	29.0 (.25)	25.2 (.36)	53.9 (.21)	23.8 (.35)
Private Long-Term Capital, Net	6.8 (.60)	44.2 (.38)	36.6 (.52)	92.5 (.36)	40.3 (.59)
Other Financing Flows, Net	−0.3 (−.02)	17.7 (.15)	6.0 (.08)	54.5 (.21)	−13.4 (−.19)

[a] Figures in parentheses represent share of total.

[b] Projected figures.

[c] The minus sign indicates an accumulation of reserves.

SOURCE: International Monetary Fund, *World Economic Outlook*, May 1983, Table B28.

1973, 78 percent in the period 1974–76, 96 percent in the period 1977–78, 78 percent in 1979–81, and (projected) 75 percent in 1983.

The external debt of the NODCs has grown much more rapidly than either their exports of goods and services or nominal GDP (first two rows of Table 3). As a proportion of GDP external debt has risen by 12 percentage points over the last 10 years. Much has been said about the increasing debt burden borne by NODCs following the rise in dollar interest rates of the last few years. To shed some light on this issue we have computed the average interest rate on NODC external debt (third row of Table 3) and compared it with short- and long-term U.S. interest rates (fourth and fifth rows). This comparison is justified by the fact that the bulk of foreign debt is denominated in dollars. It is clear that the NODCs enjoy a substantial average subsidy which is larger if measured in relation to long-term rates than short-term rates.[2] The conclusion we draw from these data is that, while the burden of debt has risen for the NODCs since 1979, the existence of a significant and rising subsidy has worked in the direction of keeping the average real cost of borrowing below or close to the growth rate of output (see Table 6).

The Stability of the International Banking System

There has been a chorus of fears that defaults on the external debts of major NODCs would jeopardize the stability of the international banking system, leading to massive bank failures. These, in turn, would trigger deflationary forces reminiscent of those of the 1930s. In this section we evaluate the merit of those arguments, and ask the question whether any collective action is needed to ensure a stable international banking system.

Our starting point is to treat the international banking system as a club, and to assume that the interests of the countries and their banks coincide.[3] We later relax this assumption. The club exists because the total benefits to the members exceed the costs of joining and maintaining the arrangement. Countries benefit from membership by raising the cost of default to borrowers (for example, by cross-country default clauses). Benefits, however, being shared by all members, become diluted. Free-riding is an inherent aspect of clubs. As the membership increases individual benefits fall relative to the cost of maintaining the arrangement. Cost-sharing formulas have to be

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[2] The access of the NODCs to concessional loans explains to a large degree the size of the subsidy.

[3] See Olson (1965) for an economic theory of clubs, and Fratianni and Pattison (1982) for an application to international organizations.

TABLE 3

EXTERNAL DEBT RATIOS AND INTEREST PAYMENTS OF NON-OIL DEVELOPING COUNTRIES (PERCENT)

	1973	1974–76	1977–78	1979–81	1983[a]
1. Ratio of External Debt to Exports of Goods and Services	115.4	117.5	128.3	119.0	144.4
2. Ratio of External Debt to GDP	22.4	23.8	28.0	28.7	34.7
3. Ratio of Interest Payments to Total Debt	5.3	5.3	5.3	8.5	8.3
4. Prime Rate Charged by U.S. Banks	8.0	8.5	7.9	15.6	11.0[b]
5. Yield on U.S. Corporate Bonds, Moody's Aaa	7.4	8.6	8.4	11.9	12.0[b]
6. Row 3 minus Row 4	−2.7	−3.2	−2.6	−7.1	−2.7
7. Row 3 minus Row 5	−2.1	−3.3	−3.1	−3.4	−3.7

[a] Projected figures.

[b] Monthly average for the first ten months of the year.

SOURCES: International Monetary Fund, *World Economic Outlook*, May 1983, Tables B32, B33, and B35 for the first three rows; *Economic Report of the President*, 1983, Table B-67; and *Economic Indicators*, October 1983, p. 30 for the fourth and fifth rows.

revised if the old members are not to lose interest in the arrangement. If no satisfactory formula can be found, the club is likely to disintegrate. The cohesiveness of the club is strengthened if there are dominant members who enjoy a large share of the total benefits. These members identify their individual interests with the interest of the club, and are willing to take voluntary actions (that is, to raise their share of the cost) to keep the club cohesive.

How can we apply these propositions to international banking? To begin, we must note that the latter deals primarily in dollar-denominated assets and liabilities. This is illustrated by Table 4, showing the currency breakdown of international banking activities.

TABLE 4

CURRENCY BREAKDOWN OF INTERNATIONAL BANKING (Billions of U.S. Dollars)[a]

	U.S. Dollars		Other Currencies	
	Assets	Liabilities	Assets	Liabilities
1970	60.4	58.7	17.9	16.6
1982	866.1	970.6	283.6	278.0

[a] The figures for 1970 and 1982 are not fully comparable because definitions have changed.

SOURCE: Bank for International Settlements, *Annual Report*, various issues.

In 1982, 75 percent of international bank loans were denominated in dollars. The relative position of the dollar in international bank loans declined during the latter part of the 1970s but regained some of the lost ground in the last few years. In 1970, the corresponding figure was 77 percent.

The leading position of the U.S. dollar in the world banking system has important implications. First, it implies that the United States takes a relatively large share of the total benefits generated by the system. To be sure, the 75-percent figure mentioned above overstates the share of the benefits enjoyed by the United States, since part of the dollar bank loans is generated by non-U.S. banks. However, dollar loan business supplied by non-U.S. banks produces indirect benefits to the United States because it extends the size of the dollar standard worldwide. Consequently, U.S. residents can use their currency in international transactions, and thus avoid the exchange-rate uncertainty associated with these transactions. More simply, the United States derives sizeable benefits from the present international banking arrangement.[4]

So much for the benefits. What about the costs to the United States? There are costs in the actual and potential U.S. decisions to extend its regulatory control to the international banking operations. It is now generally accepted by economists that an essential part of the regulatory apparatus is the lender-of-last-resort (LLR) service provided to U.S. banks. There is virtually no disagreement on the proposition that this service is essential to ensure stability to the banking system in times of crises. The problem facing the international banking club is that the cost of providing the LLR service cannot be easily shared. Indeed, the difficulty or inability to share costs is a prediction of the theory mentioned above. It follows that the United States must bear this cost completely.

The question then becomes whether or not the Federal Reserve is willing to extend the LLR service to the international dollar banking system. There is no doubt that the LLR service is implicitly extended to the foreign branches of U.S. banks.[5] More subtle problems arise concerning the LLR service to non-U.S. banks operating in the dollar banking market.[6]

The important insight gained from the economic theory of clubs is that, given the size of the benefits, the United States has a strong incentive to bear the cost of an extension of LLR service to non-U.S. banks operating in the dollar banking market. This implication may be puzzling since it is not obvious that the Fed is willing to supply LLR service to, say, a French bank in Paris which is outside the reach of its regulatory domain. All that is needed, however, it that the Fed extend its LLR service to foreign central banks.

To clarify why the extension of LLR service to foreign central banks is a substitute for LLR service to foreign private banks, consider the following example. A French bank located in Paris and doing business in dollars faces a dollar-liquidity crisis: Deposit owners want to convert their dollar deposits into deposits with U.S. banks or into U.S. currency. The French bank turns to the Banque de France to obtain the necessary dollar reserves. If the Banque de France has a sufficient stock of dollar reserves it will be able (and probably willing) to lend dollars to the domestic bank. If not, it will have to borrow dollars from the Fed. If the Fed agrees to the transaction, LLR service is extended to the Banque de France.

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[4] We disregard here the gains which accrue to the holders of deposits if the banking system is competitive.

[5] See Guttentag and Herring (1983a) on this point.

[6] See Johnson and Abrams (1983).

Our prediction is that the Fed will be willing to extend this kind of LLR service to foreign central banks, or at least to the central banks of the major industrialized countries. Therefore it can be said that the Fed's LLR service implicitly covers the major part of the international dollar banking system.[7]

Having disposed of the principle, let us investigate the amount of LLR service that will have to be provided by the Fed, should a financial crisis emerge. The fact that foreign central banks have dollar-denominated reserves reduces the potential amount of LLR service of the Fed. Table 5 bears on this issue.

The table shows the ratio of the central banks' foreign exchange reserves to the foreign liabilities of the domestic banks. A high ratio indicates that in periods of liquidity crises the central bank has substantial amounts of foreign exchange to lend to domestic banks faced with foreign exchange deposit withdrawals. Since the bulk of foreign exchange reserves and banks' foreign liabilities is denominated in U.S. dollars, a high ratio also means that the supply of LLR service by the Fed to other central banks is low. In contrast, a low ratio implies that the Fed's supply of LLR service is high. The evidence of Table 5 suggests that if a major international liquidity crisis were to arise, existing foreign exchange reserves (mostly dollars) would

TABLE 5

RATIO OF CENTRAL BANKS' FOREIGN EXCHANGE RESERVES TO COMMERCIAL BANKS' FOREIGN LIABILITIES

Year	Japan	France	Germany	Italy	Switz.	Neth.	Belgium
1976	.48	.09	.84	.14	.21	.14	.06
1977	.70	.07	.80	.34	.18	.13	.08
1978	.74	.10	.73	.29	.25	.09	.06
1979	.32	.15	.62	.40	.18	.12	.07
1980	.27	.19	.61	.44	.14	.16	.09
1981	.25	.15	.59	.36	.10	.12	.05
1982	.19	.11	.61	.33	.11	.14	.04

SOURCE: International Monetary Fund, International Financial Statistics.

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[7] Some technical problems remain, however, concerning those consortia banks that have no clear national origin. The importance of these banks in the international banking system is limited.

be inadequate to cope with the problem, with the possible exception of Germany. The Fed would be called upon to supply LLR service. Table 5 also suggests that the size of the potential LLR service has increased since the mid-1970s in connection with the decline in the reserve ratios of Germany, Japan, and Switzerland. With reference to the theory of clubs, these inferences can be construed as evidence that the responsibility, and therefore the cost, of maintaining the international banking system has increased for the United States, thus weakening its incentive to take action in times of crisis.

It is interesting to note here that in other areas of international cooperation the U.S. incentives to lead have deteriorated substantially (see Fratianni and Pattison 1982). This is especially the case in the field of international trade, where as a result of the declining relative position of the United States, its share of the total benefits from an open trade system has diminished.

The recent increase in the club cost borne by the United States notwithstanding, we believe that the U.S. benefits still exceed the costs by a substantial margin. The United States still retains a strong incentive to take action, should a crisis emerge.

The arguments of this section can be summarized as follows. The international banking system can be likened to a club. The total benefits of the club exceed the costs of maintaining the club. These club benefits are diluted among the members. For the club to remain attractive, cost-sharing formulas must be devised. A characteristic of the international banking club is that a substantial component of the cost of maintaining the club cannot easily be shared. This is the cost resulting from providing LLR service to banks. At present the United States bears the cost virtually alone. The issue at stake is whether or not the United States has the incentive to bear this cost, and in so doing to take the responsibility to buttress the international banking system should a crisis arise. Our qualitative answer to this question is that the United States is still a net beneficiary from an open and efficient international banking system and, therefore, is willing to provide the LLR service to banks transacting in U.S. dollars.

International Lending and Collective Action

The economic theory of credit markets has identified a number of potential sources of inefficiency, arising principally from the way risk is assessed and "priced." In this section we analyze three aspects that have a particular bearing on international lending: the so-called moral hazard, "lemon," and free-rider problems. The existence of these phenomena provide lenders with incentives to take collective action.

Moral Hazard

There is moral hazard when the borrower increases the riskiness of the project upon receiving funds from the lender. By raising the variability of the returns of the project or projects the borrower reduces the value of the lender's claim. In anticipation of such behavior the rational lender charges a risk premium. But a higher interest rate induces the borrower to further increase the riskiness of the investment project, in turn raising default risk. There is an interest rate high enough to discourage the lender from committing his funds because the default risk is perceived to be too high. This phenomenon leads to a backward-bending load supply curve.[8]

The existence of moral hazard induces lenders to set credit ceilings, closely monitor the activities of the borrower, and prescribe penalties on undesirable (for the lender) behavior. These considerations, however, do not apply to international loans because contracts cannot be enforced across national boundaries; that is, the so-called sovereign risk. Unlike domestic borrowers, foreign borrowers can default even though solvent. Stated more bluntly, the borrower's dishonesty has a higher payoff with international loans than domestic loans.

In the absence of a generally accepted world legal system, rational lenders seek ways to induce borrowers not to raise the riskiness of their investment projects (including consumption) or to repudiate their debts. The most effective tool in the hands of lenders is the cohesiveness of the international banking system which shuts out those who repudiate debt from future borrowings. With this knowledge individual lenders set credit ceilings when total benefits of default to the borrower are equal to the costs of default to the borrower.[9] The benefits of default are proportional to the size of the loan; the costs are proportional to the size of future borrowings. The more variable is the borrower's output, the more valuable it is to retain access to international credit markets. Lenders should perceive high-income-variability countries to be less prone to default than low-income-variability countries. It also follows that lenders will have stronger incentives to reschedule when the future is more output-uncertain than the present, for the cost of default to the borrower will rise.

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[8] This problem has been analyzed extensively in the finance literature. See Jensen and Meckling (1976) and Myers (1977).

[9] Cf. Eaton and Gersovitz (1981a, 1981b).

Defaults need not be complete. Borrowers can partially default, or debase the value of the loan, by lowering the negotiated interest rate. Indeed, this is the most relevant case for today's experience. The ability of borrowers to renegotiate better terms—either lower interest rates and/or longer maturities—is greater the larger the size of the loan as a proportion of the lender's net worth. A small borrower (in relation to the lender's net worth) who omits a few interest payments can be declared in default by the lender, with all the attendant consequences.[10] A large borrower, on the other hand, can omit interest payments with impunity because the lending institution, by declaring the borrower in default, makes itself insolvent.[11] Large borrowers would be expected to renegotiate loan terms more successfully and more frequently than small borrowers. In turn, rational lenders would protect themselves against this outcome by forming syndications whereby an overexposed bank can sell loans to an underexposed bank.

The history of international lending provides some evidence about the relevance of the outlined theory. Before 1930 the bulk of international borrowing took the form of publicly issued bonds. The costs of collective decisions were high. Bondholders had no choice but to declare a country in default when payments were in arrears. These collective costs were reduced in the second half of the 19th century when major Western powers used gunboat diplomacy to prevent debt repudiation.[12] We can think of Western governments providing the public good of contract enforcement. Risk premiums on international borrowings were reduced and borrowers as well benefited from the imperialistic behavior of Western powers in the form of lower interest rates.

During the 20th century the scope for gunboat diplomacy diminished and the international bond market turned out to be an organizational structure unable to cope with the moral hazard problem. The absence of an effective military umbrella able to enforce loan contracts left bondholders powerless if the borrowing countries decided to repudiate their debt. The costs of collective decisions were too high for this form of lending to persist.

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[10] In the present arrangement, countries declared in default are subject to cross-country default clauses.

[11] See Pandit and Rai (1983) for a model based on this principle.

[12] The Western powers did not send their gunboats with each foreign debt repudiation. In fact, most often they did not. However, the threat of sending gunboats was sufficient to affect borrowing countries' behavior.

The answer to this problem came through the transformation of the international credit market into the form known to us today. As theory predicts, the international banking system could cope more effectively than bondholders with moral hazard in the absence of gunboat diplomacy. The small number of banks involved, compared to the number of bondholders, reduced the cost of collective action. The lenders now could more easily engage in group action and threaten the borrower with penalties if he decided to repudiate his debt. As long as the international banking system maintained its cohesiveness, the threat of exclusion from the international credit system was a very effective constraint on the borrower's proclivity to default. This cohesiveness now is beginning to break down, a theme to which we return below.

Guttentag and Herring (1983b; 1984) have proposed that part or the whole of the international debt of the NODCs be converted into long-term bonds and "marked to market." In terms of our club theory, such an outcome would further weaken the international bank cartel and its resolve to apply penalties if repudiation were to occur. By the same token it would increase the incentive of borrowers to default. In this connection, there has been some discussion as to whether the IMF, or the World Bank, could not take over the role of the international banking system in monitoring the behavior of the borrowing countries, thereby reducing risk in the international credit markets. In fact, the IMF has been doing just that for years. Many of the proposals advanced to solve the current international debt crisis envision a larger role of the IMF in this area.[13] But how effective has the IMF been in reducing the moral hazard problem in international loans? Vaubel (1983) argues that this institution, by lending at subsidized interest rates, has increased the NODCs' incentives to postpone debt service payments to obtain relatively cheap IMF loans. Although one may disagree about the empirical significance of this phenomenon, the question remains whether the IMF, or any other international organization, would be able to cope effectively with moral hazard.

The "Lemon" Problem

The "lemon" problem in the international loan markets arises because of the asymmetry of information available to lenders and borrowers. Each borrower represents a different risk. In addition, the borrower may not be forthcoming in revealing the true nature of the risk he represents to the lender. If the information needed to evaluate the risks of the different borrowers is too costly to collect, lenders set a uniform interest rate reflecting the average risk of the loans. This will then tend to drive out from the loan market the low-risk borrowers who find the market interest rate too high. Lenders have to further increase the interest rate to reflect the higher average risk of the pool of borrowers. An adverse selection process occurs whereby low-risk borrowers are driven out of the market and the lenders are stuck with the "lemons."[14]

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[13] Cline (1983) offers a survey of these proposals.

The "lemon" problem is resolved in domestic credit markets by firms specializing in the collection of information about individual borrowers. As a result, borrowers are rated according to risk and lenders set interest rates to reflect these risks. Thus adverse selection ceases to be a problem.

The collection of information about risk characteristics of individual borrowers is more costly in the international loan market than in the domestic markets, making it relatively difficult to establish reliable credit ratings for individual countries. The IMF has emerged as one of the most important information-gathering institutions in the international credit markets. It has thereby provided a useful service to borrowers and lenders alike. However, in refusing to establish credit ratings for individual countries, and in charging uniform interest rates on all its loans, it has been saddled itself with a "lemon" problem. The largest part of the loan portfolio of the IMF now consists of high-risk countries.[15] This is the inevitable result of the uniform interest rate policy of the IMF: The low-risk countries find the IMF loans unattractive and do not apply for these loans.[16] The IMF is left with the "lemons." This situation forces this organization to either increase interest rates or to tighten the conditionality of its loans. In the end this situation reduces the effectiveness of the IMF in helping to resolve the international debt crisis.

The Free-Rider Problem

Like so many economic activities, the extension of international loans creates externalities. These, in turn, give rise to free-riding. When a bank with a high reputation extends a loan to a country a signal is sent to other banks that the borrowing country is a "safe investment." These other banks are in effect free-riders because they gain from the expense incurred by the first bank in assessing the credit risk involved. If additional loans are made to the same country the first bank finds that its exposure has become riskier. The actions of the "free-riding" banks have devalued the claims of the first bank on the borrowing country.

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[14] Akerlof (1970) is the *locus classicus* of adverse selection and "lemons."

[15] Vaubel (1983) calculates that "30 out of 114 IMF members accounted for all cases of debt rescheduling in 1960–82, and that 14 member countries accounted for more than 80 percent of the (country) years for which debt was rescheduled."

[16] The effective rate borne by borrowing countries is the actual rate charged plus the implied costs of the conditions imposed by the IMF.

It is alleged that this market failure has led to an excessive expansion of loans in recent years. We question the validity of this conclusion. For we know that, in the presence of free-riding, banks have an incentive to take collective action. Syndication, for example, has allowed them to spread the cost of setting up and organizing the loans more evenly over large groups of banks. Loan syndication is the market answer to free-riding. Whether it has allowed banks to eliminate this problem altogether is difficult to say.

Recently, free-riding has reemerged in reverse form. As banks felt compelled to reschedule loans to troubled countries, smaller banks dropped out of the syndication to reduce their exposure to risky countries, thus raising the riskiness of the claims held by the remaining banks. Without some form of collective actions, this process would induce more banks to discontinue lending and would eventually lead to a financial crisis and debt repudiation.[17]

Next, we analyze how the international banking system has met the challenge of free-riding in reverse; and explore the policy issue of whether additional collective actions, including those by international organizations, may be required to avert an undue contraction of international debt.

Free-Riding in Reverse and International Credit

The banking system has reacted to free-riding in reverse in several ways. One reaction has tended to aggravate the problem; another reaction has tended to alleviate it. To protect themselves against a financial panic, banks have shortened the maturity of their loans. While shorter maturities allow an individual bank to "get out" more quickly during a crisis, it does not work for the system as a whole. When all banks shorten maturities, nobody can "get out" more quickly. In fact, the probability of a financial crisis increases because as debt service by borrowing countries rises, so does the benefit of default.

The second reaction of the international banking system has been to strengthen the cohesiveness of loan syndicates. This has been achieved in two ways. First, the larger banks have generally agreed to take a larger share of new loans in rescheduling agreements.[18] Second, the IMF has played a leading role in ensuring a minimal amount of new lending to the NODCs. It has achieved this mainly by increasing its own lending and by attaching its own reputation to these loans. In a sense it is proper to say that banks have continued to lend by free-riding on the IMF-quality label. Thus, the problem posed by free-riding in reverse has been temporarily solved by the major banks and the IMF rescheduling loans.

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[17] See Eaton and Gersovitz (1981a) and Sachs (1983) for a rigorous treatment of this process.

The natural question to ask is whether this collective action may not have gone too far. This is important not only for the banks, but also for the IMF, which has committed its reputation, and thus stands to lose it should part of the new loans be repudiated. To this issue we now turn.

We begin with the distinction of whether the debtor countries should be considered illiquid or insolvent. Illiquidity implies that debtor countries have a positive net worth, but are unable to repay their debt today as a result of insufficient liquid assets. Insolvency means that the debtor countries have a negative net worth.

The wealth of a nation consists of natural resources, reproducible physical assets, and monetary balances (if the country's money is convertible into foreign monies). In the absence of sovereign risks, international loans could be collateralized by the wealth of the nation. With sovereign risks, much of the wealth of the nation has no bearing as to whether a loan will be repaid or not. To capture this feature, we define country's solvency by the following equation:

$$NW_0 = \sum_{t=0}^{\infty} \frac{1}{(1 + r)^t} CA_t - L_0 , \tag{1}$$

where NW_0 is the sovereign-risk adjusted net worth of the country, CA_t is its expected current-account balance in period t in today's prices, r is the real interest rate, and L_0 is its foreign debt today.[19] Equation (1) can be interpreted as follows. When NW_0 is positive the present value of the country's future current-account balance exceeds its current level of external debt. In other words, the country in question will be able to generate enough foreign exchange revenues in the future to repay its outstanding foreign debt. However, when NW_0 is negative the country's external debt exceeds its capacity to generate foreign exchange revenues in the future. Such a country is defined as being insolvent in our sense.[20]

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[18] For evidence see Sachs (1983, p. 43).

[19] See Sachs (1983) for a similar analysis.

It is clear that it matters a great deal whether a borrowing country is illiquid or insolvent. In the former case it makes sense to ensure that countries have continued access to foreign credit; and it makes sense to prod creditors to maintain a sufficiently high level of loans so that the illiquidity of the borrowing country does not degenerate into insolvency. On the contrary, if a country is perceived to be insolvent it makes no sense for creditors to reschedule; and it makes no sense for the IMF to lead banks into new commitments. Under these circumstances the appropriate strategy is to implement a prudent amortization schedule of the "troubled" loans in the books of the banks.

Are the NODCs Illiquid or Insolvent?

The issue of whether the large debtor countries are illiquid or insolvent is an empirical matter. Equation (1) cannot be easily quantified, for it deals with potentially many unknown events which can affect the future values of CA. Our discussion, by necessity, will be qualitative and will try to isolate general trends and behavioral patterns that will influence the creditor's judgment on whether NW_o is positive or negative. We rewrite the equation (1) using the following definition of the current account:

$$CA_t = Q_t - A_t , \tag{2}$$

where Q is domestic output and A is the level of domestic absorption or spending on goods and services. Substituting (2) in (1), we obtain:

$$NW_o = \sum_{t=0}^{\infty} \frac{1}{(1 + r)^t} (Q_t - A_t) - L_o . \tag{3}$$

The net worth of a country depends positively on the prospective growth rate of its domestic output (Q) and negatively on the prospective growth rate of its domestic spending (A) and the real interest rate (r). An increase in the real interest rate reduces NW_o by reducing the weights given to periods in the distant future when the country is expected to have current-account surpluses.

The 1970s were characterized by high growth rates of output, low ex ante real rates of interest, and high spending growth rates. Table

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[20] One should add here that a decline in NW_o may increase the borrowing country's incentive to default even before NW_o becomes negative. Thus, although a country may have the capacity to service its debt, its willingness may be lacking. This is the moral hazard problem discussed earlier.

6 shows the average annual rate of growth of Q and of the inflation rate of the NODCs, as well as the inflation rate differential between NODCs and the industrial countries. The latter is taken as a proxy of the growth of domestic spending in the NODCs. The data suggest that an abrupt change took place in the period 1979–81: Growth rates of Q fell, while growth rates of A increased. Both occurrences worked in the direction of lowering the NW of the NODCs.

Furthermore, during the 1970s the real interest rates in the United States were very low compared to the preceding period. Both the ex ante and the ex post real interest rates were close to zero on the average during the seventies.[21] This can certainly be called an unusual situation, which is not likely to persist. The low real interest rates of the seventies may have given the lenders false signals about the long-run capacity of the NODC borrowers to repay their debt. Likewise, the lending banks may have overestimated the net worth of these countries during the seventies, and lent too much to them. It is likely that the lenders may have done the opposite since 1980, when the real interest rates in the United States were unusually high.

Two conclusions can be drawn from our analysis. First, a significant part of the existing NODC debt should be classified as bad loans. For it is unlikely that dollar real interest rates will return to the low levels of the seventies. Second, since 1980 dollar real interest rates have been unusually high, leading to excessive pessimism about the capacity of borrowers to repay their debt. It follows that the current crisis is part illiquidity and part insolvency. The response of the international banking system, therefore, has to include measures aimed at keeping a minimal level of new loans to NODCs to ensure that these countries can ride out the present period of unusually high real interest rates. There is also a need for measures aimed at amortizing a fraction of the loans which in a world of permanently higher real interest rates cannot be repaid.

Our analysis also sheds light on the merit of some proposals that have been advanced recently to solve the international debt crisis. We discuss two of these as they are representative of a large class of similar proposals. In one class of proposals—see for example Cline (1983)—the argument is made that NODC borrowers face today illiquidity, and that insolvency is secondary.[22] According to this view,

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[21] The ex ante real interest rate is the nominal interest rate minus the expected rate of inflation. The ex post real interest rate is the nominal interest rate minus the realized rate of inflation. Huizinga and Mishkin (1983) estimate the ex ante real rates for a six-month T-Bill to be 2.0 percent during the sixties and 0.1 percent during the seventies.

[22] See also Morgan Guaranty (1983).

TABLE 6

OUTPUT GROWTH AND INFLATION RATES OF NON-OIL DEVELOPING COUNTRIES

	1973	1974–76	1977–78	1979–81	1983[a]
1. Annual Percentage Change of Real GDP, Weighted Average excluding People's Republic of China	6.1	4.9	5.3	3.8	1.9
2. Annual Percentage Change in Consumer Prices, Weighted Average excluding People's Republic of China	21.9	27.8	25.0	33.9	39.6
3. Row 2 minus Annual Percentage Change in Consumer Prices of Industrial Countries	14.2	17.0	17.2	23.7	34.1

[a] Projected figures.

SOURCE: International Monetary Fund, *World Economic Outlook*, May 1983, Tables B2, B3, and B7.

steps must be undertaken to ensure a continuing flow of credit to the NODCs. In particular, the major industrialized countries must follow a more expansionary monetary policy. The United States is urged to reduce its budget deficit to permit, in conjunction with a less tight monetary policy, dollar real interest rates to decline. In brief, the main message of this class of proposals is that stimulative monetary policies in the major industrialized countries, especially in the United States, can solve the present international debt crisis.

We doubt the validity of this conclusion. First, as we have pointed out, the international debt crisis is also a problem of NODC insolvency. Stimulative monetary policies cannot overcome this state of affairs, except temporarily. The experience of the seventies points to the dangers of monetary stimulus. The excessive monetary expansion of the seventies is one of the ultimate causes of the present international debt crisis. For, by leading to a temporary reduction of real interest rates, it helped to fuel the explosion of bank lending to the NODCs.

Another class of proposals—see for example Kenen (1983)—recognizes that NODCs are insolvent in the sense of equation (1). It advocates the establishment of a new international organization that would buy troubled loans to NODCs in exchange for newly created long-term bonds. The purchase would occur at a price below the face value of the loans. Although the discount would reflect the insolvency of some NODC borrowers, the recommended size (10 percent in Kenen's proposal) is kept so low that inevitably the international organization purchasing NODC debt would have to be subsidized by national treasuries.[23] For some reason many academic economists have been convinced that the insolvency of the NODC borrowers can only be dealt with by the taxpayers of the industrial countries bearing the bulk of the losses.[24]

Bank Losses and Domestic Collective Action

We have argued in the previous section that part of the NODC debt owned by banks cannot be repaid. Therefore, it seems to be inevitable that banks, and their shareholders, will incur significant losses. The size of the problem for the U.S. banking system is illustrated in Table 7.

There is no doubt that the exposure of the U.S. banking system to NODCs is substantial. In 1982 total loans to NODCs represented

[23] See also Rohatyn (1983) and Weiner (1983). Many of these proposals combine debt conversion with money creation by central banks.

[24] A notable exception is Brunner et al. (1983).

TABLE 7

EXPOSURE OF U.S. BANKS TO NODCs IN 1982

	Bank Capital[a]	NODC Loans[a]	Exposure[b]	Loans to Brazil and Mexico[a]	Exposure[b]
All U.S. Banks	70,624	103,181	146.1	44,815	63.5
Nine Largest U.S. Banks	29,014	64,149	221.2	25,558	88.1
Other U.S. Banks	41,610	39,032	93.8	19,257	46.3

[a] Millions of U.S. Dollars.
[b] Percent

146 percent of the capital of U.S. banks. A disaggregation of the data, however, reveals that the problem is highly concentrated among the largest U.S. banks. The nine largest banks had loans to NODCs amounting to 221.2 percent of their capital; for the rest of the U.S. banking system relative exposure was 93.8 percent. Thus, although many U.S. banks would suffer important losses if some NODCs were to default on their debt, only a few of the largest banks would be risking bankruptcy.

The concentration of the likely losses on NODC loans has important implications for the kind of collective action that takes place domestically. We know that collective action is costly. However, if successful, the benefits to the whole industry are likely to be a large multiple of the cost. Individual members will only engage in collective action if their share of the benefits exceeds the cost of the action. The high concentration of troubled loans among a small number of U.S. banks makes it likely that these banks will engage in collective action aimed at shifting their losses onto the rest of society.

The collective action undertaken by banks follows the traditional pattern. It consists of direct political lobbying and dissemination of information about the special character of the banking system. Opinion makers are told that without some form of socialization of bank losses the whole U.S. banking system will collapse. Since this would have dire consequences for the whole economy, the cost for the taxpayer is only a small price for ensuring a stable and prosperous economy.

Conclusion

Our analysis of the political economy of international lending leads us to the conclusion that the few large U.S. banks that would be most affected by Third World debt repudiation will have a strong incentive to socialize their losses via collective action. But we have argued that the existing U.S. banking system has sufficient safeguards to provide for overall stability in the banking system.

Thus, even if the shareholders of large U.S. banks were forced to bear the losses on bad NODC loans, the U.S. banking system would continue to function properly. The pressing question that remains, however, is: How can the U.S. taxpayer counteract the collective action of banks?

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REFLECTIONS ON THE INTERNATIONAL DEBT CRISIS

Larry A. Sjaastad

The Theory of Clubs

The chief novelty of the interesting paper by De Grauwe and Fratianni (1984) is their application of the theory of clubs to the international banking community. Within that context, various issues are analyzed, such as the free-rider problem, moral hazard, and the "lemon" problem. One thing that is not clear, however, is the membership of the club. In parts of the paper, it seems that the club is constituted by the commercial banks engaged in international lending; at other points in the paper, one gets the impression that the club also includes the central banks of the major creditor nations. At yet other points, the club seems to involve the major international financial institutions as well. It would be useful if De Grauwe and Fratianni would be a bit more precise in defining their "clubs."

One aspect of the international debt issue that would appear to be amenable to analysis within the context of the theory of clubs (but which is not taken up in the paper) is the degree to which the larger loans were syndicated; in some cases more than one hundred banks contributed to a single loan, some of those contributions being quite trivial. That this feature is a potential source of serious difficulty for the major lending banks is obvious—any member of the syndicate can, if circumstances permit, declare a default, even though it might cause serious difficulties for the major lenders. Certainly the larger banks must have perceived some benefit in return for the increase in risk associated with incorporating a large number of minor lenders. Perhaps the expected return was political in nature. Several major U.S. banks have exposures in a single country that amount to an

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appreciable percentage of their capital; if that country were to default, those banks would either require massive assistance or would face a massive contraction. The probability of getting that assistance through the political system surely must increase with the number of congressional districts in which lending banks exist, and hence the number of congressmen to whom appeals can be made.

Should the Fed Be Involved?

Another topic treated at length in the paper is the lender-of-last-resort facility. De Grauwe and Fratianni argue that it might well be in the interest of the Federal Reserve, for example, to be the lender of last resort to foreign commercial banks that have dollar-denominated liabilities. I find the case less than a convincing one. First, there is a serious moral hazard issue involved in having the central bank of one country essentially guarantee liabilities of a bank in another, given that the former has no regulatory authority over the latter. Second, such a policy would enhance the attractiveness of dollar-denominated deposits—and loans—all over the world, thereby magnifying the responsibilities of the Fed while at the same time complicating its ability to control the money supply. Finally, what problem does the proposal intend to solve? If a French commercial bank gets into trouble because it has dollar-denominated deposits but no dollars, it obviously can get the dollars in the exchange market *if* it has the francs with which to buy them. As it is a clearly defined responsibility of the Bank of France to do the necessary rediscounting to provide the francs, there would appear to be no compelling case for the Fed to be involved.

The External Debt Service Choice

Fratianni and De Grauwe argue at the outset that many existing international loans should be classified as "bad" loans. Subsequently, when the authors take up the insolvency versus illiquidity issue, the meaning of a bad international loan seems to be a situation in which the present value of "expected" future current account balances fall short of present indebtedness. This analysis does not seem to recognize that current account balances, which reflect the difference between output and expenditure, are endogenous; obviously countries that make no effort to service their external debt (by failing to contract domestic expenditure) will be insolvent by the De Grauwe–Fratianni criterion, while those that do make an effort will be solvent.

The issue is not whether a country is solvent or insolvent—that is a phony issue. The frequently heard phrase that "countries don't go broke" is obviously true—but irrelevant. The issue is whether or not countries will *choose* not to service their external debt because they find that debt service too onerous. Moreover, the De Grauwe–Fratianni solvency criterion ignores the fact, frequently pointed out by Allan Meltzer[1] among others, that countries have the clear possibility of servicing—indeed, canceling—their external debt with equity transfers rather than trade surpluses. That such equity transfers are technically feasible is witnessed by the facts that the public sectors of virtually all major debtor nations are huge and the substantial number of public sector enterprises have considerable assets. Couple this observation with the fact that most of the international debt is owed by (or guaranteed by) governments, and the simplicity of the solution is remarkable. It is quite safe to assert that currently there is not a single case of country insolvency by any reasonable definition of the term.

But one is compelled to agree with De Grauwe and Fratianni (p. 166) that "it seems to be inevitable that banks, and their shareholders, will incur significant losses" (although the stock market seems to be saying the opposite). What this means is that, despite their solvency, countries will effectively default. This will occur when the political will to contract domestic expenditure and/or sell public-sector enterprises is weaker than the political will to face the (not inconsiderable) consequences of default. As the banks cannot be excused from having been unaware that sovereign loans have this special and additional risk, one is less than eager to make haste in bailing them out.

Another aspect of the situation given too little emphasis in the paper in question is the bald fact that the debt service problem is fundamentally a fiscal issue—the government of Brazil, for example, can never obtain the dollars it needs for debt service until it has first acquired the cruzeiros. To get the necessary cruzeiros, it must either run a fiscal surplus or increase its domestic debt. In fact, that government shows every sort of obstinancy in taking the necessary steps to produce that surplus (its willingness to sign IMF documents notwithstanding), and currently the Brazilian bond market is saturated with government paper being issued to finance an enormous fiscal *deficit*. There is no hope that Brazil can begin to service her external debt until her government is willing to face the fiscal issue, and that is clearly a political decision.

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[1] See Meltzer (1983, and 1984, pp. 67–68).

Proposals for Reform

The final part of this comment is devoted to some discussion of the various proposals to solve the international debt problem. These fall into three categories. The first has already been discussed—essentially the Meltzer proposal to settle the debts with equity transfers. The merit of this proposal lies in its simplicity and equity. The problems are all in execution. Unusual political courage would be required for the government of Mexico, for example, to sell PEMEX to a group of New York banks. Second, there is no assurance whatsoever that ownership of PEMEX by foreign interests would result in control of PEMEX by those interests. Presumably, of course, goodwill could solve the latter problem.

A second proposal is equally laissez faire. It would simply require that the banks and the debtor nations sort out their problems, a process that presumably would result in losses on the part of the banks and some discomfort, at least in the short run, for the countries.[2] The current market value of negotiable bonds issued by Argentina and Mexico suggests the market's judgment is that a significant part of the debt will not be repaid and, if that also applied to non-negotiable debt, the capital of the lending banks would have to be written down rather drastically. Indeed, a number of banks might not survive, including some very large banks. Orderly liquidation of banks is, fortunately, an activity in which we have accumulated a lot of experience, so the fact that the size of the operation might be unprecedented is not a credible objection to this solution. This, of course, is the solution that bank managers fear most but the one that the debtor countries should prefer. The former would become unemployed, but the latter would escape the penalties arising from unilateral default while still seeing at least part of their external debt washed away at the expense of the banks.

The third set of solutions emphasizes that the problem is "public" in the sense that large externalities exist. These range from direct bailouts of the countries (and hence the banks) to indirect bailouts either by laundering the funds through the IMF *cum* World Bank or by depreciating the debt by world inflation. Proposals such as William Cline's for expansionary policies in the OECD countries also fall into this set, as they argue that "we are all in this together" so we are really doing ourselves a favor by making it easier for the debtor countries to pay.[3] The point is that *we* are not all in this together; so far, only the banks and the debtor-country governments are in it together. Ironically (or perhaps not so ironically), the effect of these proposals would be to "put us all together"; if we opt for economic expansion and hence for inflation, all innocent money holders pay. If we opt for transfers by non-inflationary means, innocent taxpayers will pay. No one has made a case that suggests that these quasi-populist "collective action" proposals will have fewer costs or more benefits than will the laissez-faire proposals.

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[2] For a further discussion of this point, see Sjaastad (1983).

[3] See Cline (1983).

Of course, the problem may be resolved by a miracle. The international debt crisis is very much a consequence of the very strong appreciation of the U.S. dollar beginning in late 1980. A sustained collapse of the dollar would go a long way towards its resolution. But that would require a genuine miracle in that European economic policy would cease to be worse than that of the United States.

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KEY ISSUES IN THE WORLD DEBT PROBLEM

Rimmer de Vries

Introduction

The paper by De Grauwe and Fratianni (1984) offers an extraordinarily lucid analysis of the risks in international lending from the perspectives of both central banks and commercial banks. The basic contention of their paper is that the debt crisis of the less developed countries (LDCs) encompasses significant long-run solvency problems as well as short-term liquidity problems. In dealing with the debt crisis, the authors argue that the Federal Reserve System must be ready to extend lender-of-last-resort (LLR) provisions to all international banks, not just U.S.-owned banks. The reason is that a large percentage of loans to LDCs (at least 75 percent) are dollar-denominated, and the ability of foreign central banks to come to the assistance of non-U.S. banks is limited by the central banks' holdings of dollar claims. According to De Grauwe and Fratianni, the willingness of the Fed to supply LLR service increases the cost of maintaining the international banking system for the United States, but the price—although rising—is worth it.

The remainder of the authors' paper is concerned with potential sources of inefficiency in international lending: the so-called moral hazard, "lemon," and free-rider problems. De Grauwe and Fratianni contend that each of these phenomena provides lenders with incentives to take collective action, such that banks will find it in their own interest to continue lending to LDCs so they can ride out the period of unusually high real interest rates. In the authors' opinion, however, "A significant part of the outstanding international [LDC]

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debt should be classified as bad loans" (p. 147), and "it seems to be inevitable that banks, and their shareholders, will incur significant losses" (p. 166). De Grauwe and Fratianni are worried that banks will respond by trying to pass along the losses to taxpayers.

There are three basic issues I wish to discuss:

1. The costs to the United States of the Federal Reserve serving as LLR.
2. The extent of "bad" LDC loans, their impact on the banks, and the response of banks to the debt crisis.
3. The long-run reforms of the international lending system that are needed to prevent a recurrence of the LDC debt problem.

The Fed's LLR Function

On the first issue, I agree with the authors that it is, and remains, in the United States' own interest for the Fed to serve as ultimate LLR. Clearly, the United States and the entire Free World stand to lose considerably from a disruption of the international trade and payments system. De Grauwe and Fratianni, however, understate the extent to which foreign central banks can assist non-U.S. banks. The authors' calculations in Table 5 (p. 155), which express the ratio of central banks' foreign exchange reserves to commercial banks' foreign liabilities, exclude an important asset that central banks can utilize in the event of a crisis situation—namely, gold holdings. During the 1960s and 1970s foreign central banks, especially in Europe, augmented their gold holdings substantially. Excluding the United States, the market value of the gold reserves of the Group of Ten (G-10) countries and Switzerland currently stands at about $180 billion, or approximately 50 percent more than their foreign exchange reserves of just over $120 billion. The accompanying table demonstrates that if foreign central banks are prepared to use their extensive gold holdings and can sell or swap gold at market rates, they have considerably greater means for handling a potential liquidity shortage than is implied in the De Grauwe and Fratianni calculations.

Aside from central bank gold sales, other steps can be taken to reduce the potential burden on the Federal Reserve. One proposal calls for greater foreign-currency diversification in international lending, with the aim of reducing the proportion of dollar-denominated LDC loans from the present 75 percent to a level more nearly consonant with the share of the dollar in LDC international transactions—for example, closer to 50 percent. The Federal Reserve

RATIO OF CENTRAL BANK'S RESERVES TO COMMERCIAL BANKS' FOREIGN LIABILITIES IN 1982 (PERCENT)

	Excluding Gold	Including Gold[a]
Japan	19	29
France	11	34
West Germany	61	120
Italy	31	96
Switzerland	27	86
Netherlands	14	42
Belgium	4	21

[a] Valued at $400 per ounce.

SOURCE: International Economics Department, Morgan Guaranty Trust Company.

Bank of New York, in fact, has pushed the idea for the very reason cited in the De Grauwe/Fratianni paper. Some European central banks also are more comfortable with their banks lending in their domestic currencies for the same reason.

To present this idea as beneficial to the LDCs, however, is another matter. Had the LDCs diversified several years ago and borrowed more heavily in foreign currencies, they would have saved both interest and exchange rate costs. For example, a recent Federal Reserve Bank of New York study (1983) concludes that, had the non-oil LDCs diversified their new and maturing bank debt between 1979 and 1982, the LDCs would have saved over $30 billion, with 80 percent coming through exchange rate gains. But to start now with currency diversification is another matter, especially in light of the exceptional strength of the dollar. Thus, in the event interest rate differentials were to narrow and the dollar weakened substantially, currency diversification could actually raise the LDC debt-servicing costs. From the LDC perspective, therefore, timing is of the essence.

One issue that the De Grauwe/Fratianni paper does not delve into but that should be raised is the role that the Bank for International Settlements and the International Monetary Fund can play in assisting central banks in coping with systemic risks in international lending. To the extent these institutions are prepared to play a greater role, the LLR burden on the Federal Reserve could be reduced accordingly. In the event European central banks do not want to sell gold, for example, arrangements could be worked out with these institutions for swapping it. Also, I would not rule out the use of U.S. commercial banks providing temporary liquidity (for example, through gold swaps) to foreign central banks in case of a liquidity crisis.

The Solvency Question

A second issue that merits comment is the assertion by De Grauwe and Fratianni that a significant part of LDC debt should be treated as bad loans and that U.S. banks (especially several of the largest banks) will incur significant losses on these loans. This goes to the heart of the matter of whether the debt crisis is predominantly a liquidity crisis or to some extent also a solvency problem. The crucial question is how to quantify the solvency aspect of the debt issue.

At the onset of the crisis in mid-1982, it is fair to say that the banking community initially approached the difficulties of Mexico and Argentina as short-term liquidity problems that were triggered by external factors such as high real interest rates, world recession, and political upsets such as the Malvinas dispute and the Mexican elections. As the crisis spread and the facts became better known and the underlying performance of the major borrowing countries was better understood, it became apparent that external borrowing by several major LDCs far exceeded their ability to service debts out of actual or near-term export proceeds. It is now recognized that a proper relationship between external debt and debt-servicing capacity has to be restored.

Suppose we define a country that has a debt-to-export ratio of 2 to 1 as having the potential of creating solvency problems. At the end of 1983, the 21 major developing countries had nearly $130 billion of "excess" debt (as defined), or 23 percent of their total outstanding external debt. The excess is heavily concentrated in Latin America, where it amounted to 33 percent of outstanding external debt. However, under a scenario of modest OECD growth, flat oil prices, stable interest rates, and partial restoration of the terms of trade, this excess will be whittled down to much smaller numbers. By the end of the decade, the excess debt will be only 8 percent for Latin America, with most of the debt concentrated in Brazil and Argentina. In Argentina the excess could be reduced even further if confidence is restored and some of the capital flight is reversed. These projections tend to point out that what may appear today as a solvency problem is essentially a long-term liquidity problem. With sustained recovery and adjustment, the debt problem will be confined to a steadily declining number of countries.

Thus, while I recognize that there is a sizeable long-term liquidity aspect to the debt problem, I am less pessimistic than De Grauwe and Fratianni about the need for the banks to incur significant losses on their international loans. One reason is that I believe a workable strategy is in place to resolve the debt problem over time. Certainly, the LDC debt situation today appears more manageable than when the crisis surfaced. U.S. interest rates are down sharply from their 1982 peaks, a broad-based U.S. recovery is under way, and commodity prices have begun to turn around. LDC external adjustment has also far exceeded expectations as reflected in the stunning turnaround in Latin America's trade performance, with the seven major borrowers running a combined trade surplus of $30 billion in 1983. Equally significant is the fact that Latin American policy makers have realistically assessed the costs entailed in debt repudiation. Instead of threatening banks with default, LDCs have been pressing for temporary interest-rate relief and longer stretchouts.

Banks, for their part, have responded quite constructively to the debt situation. They have been prepared to extend new credits to LDCs (about $15 to $20 billion in 1983), and to rollover existing obligations pending implementation and adherence to IMF stabilization programs. Banks have also recently begun to lower their spreads where lending risks have been reduced as a result of IMF-backed stabilization programs. Reverse free-riding or dropouts have been kept to a minimum because of the banks' own interests. At the same time, some banks have been setting aside reserves against potential loan losses. Swiss banks reportedly have made reserve provisions covering 20 percent of their LDC loans on average, while Dutch, Scandinavian, and Japanese banks apparently have acted similarly. Loan-loss provisions by U.S. banks have not been as extensive as those of European banks, partly because of differences in regulatory and tax treatment. Nevertheless, these provisions are substantial. Morgan Guaranty Trust, for example, has set aside approximately $475 million for loan-loss reserves, with a good part covering LDC loans. Although no figures have been compiled, I would venture a guess that the major international banks in the world have allocated somewhere between $5 and $7 billion in loan-loss or special reserves against sovereign risks in addition to having written off perhaps $3 to $5 billion of international loans. It should be emphasized that despite this, some major banks have been able to report significant increases in overall earnings.

Another reason that my own views are less pessimistic than those of De Grauwe and Fratianni is that they have defined the issue of solvency in terms of the ability of developing countries to *repay* their debt over time. Repayment, however, is not the issue that concerns the banks: Countries, like companies, can be expected to add to their debt over time. What is relevant from a credit-worthiness standpoint is the ability of countries to *service* their external debt. As indicated earlier, the solution to the LDC debt problem essentially requires that countries bring their external debt more in line with their export earnings. Banks have been willing to continue lending to LDCs, instead of pulling out, mainly because they believe that a combination of a more favorable global environment, better domestic economic policies in the LDCs, interest-rate relief for some countries, and long-term development assistance offers a reasonable prospect for sustained reductions in LDC debt/export ratios. In this respect, the relevant condition for assessing the solvency issue is whether the rate of growth of export earnings exceeds the interest rate on LDC debt. If this, indeed, is the case—provided only that the current account less interest payments is in balance—LDC debt/export ratios will decline over time and credit-worthiness and access to credit markets will be restored eventually.

I hasten to say that there are still major challenges ahead. One is the need for LDCs, especially in Latin America, to sustain large trade surpluses in order to service their external debt. So far, the surpluses have been attained through radical import contraction, which in some cases has led to reductions in consumption and living standards rivaling those of the 1930s. The only viable solution over the long run calls for Latin American countries to increase their export capacity so that debt-servicing capabilities are enhanced and economic growth is restored. This will require a fundamental change in development strategies pursued since the 1950s. Priorities will have to be reordered away from import substitution toward more active export promotion, and the development role of the state will have to be reassessed in order to free resources for the private sector. Clearly, reversing such long-term trends is not an easy matter.

It must also be acknowledged that the global scenario sketched earlier is based on a stable international economic order. Considering the amount of time it takes to bring debt/export ratios of certain LDCs down to more manageable levels (for example, under 200 percent), allowance should be made for fluctuations in oil prices, interest rates, or exchange rates that are difficult to forecast, as well as for unforeseen but inevitable political disruptions—each of which could delay progress in restoring credit-worthiness. Moreover, considering the sharp erosion of confidence over the past two years, it is unrealistic to expect that restoration of voluntary lending to the LDCs will occur quickly once debt/export ratios fall below a critical threshold range. Rather, the transition from organized lending to strictly voluntary lending is likely to occur in stages as confidence is rebuilt gradually. My guess is that "managed" lending, whereby banks condition rollovers of existing obligations and extensions of new credits on IMF performance criteria, will remain with us for the remainder of this decade for most, although perhaps a declining number, of key LDC borrowers.

Long-Run Reforms

The third issue involves long-run reforms that can be taken to prevent a recurrence of the LDC debt problems. De Grauwe and Fratianni have correctly emphasized a major source of risk in international lending; namely, the moral hazard problem. Commercial banks have no means of enforcing limits on the overall indebtedness of sovereign borrowers. Even if an individual bank acts prudently in assessing LDC debt capacity and refrains from participating in a new loan to the country, its existing credits to the country can be jeopardized by the LDC's ability to obtain financing from other sources. De Grauwe and Fratianni acknowledge that one way of handling this problem is for the IMF to exert leverage to limit the country's overall indebtedness. The authors point out, however, that in the past the IMF has been unable to prevent LDCs from accumulating excessive debts. Instead, the IMF ultimately has had to extend credits to these countries once their foreign-exchange reserves have been depleted, so that the IMF has wound up holding "lemons."

I share these concerns and would agree that these are major issues that must be tackled. In view of the costs that banks have incurred and will incur from past LDC loans, as well as the pressure for greater regulatory oversight of international lending, I would be very disappointed to see a return to business as usual once LDC creditworthiness is restored. It is clearly in the banks' interests to develop a specific set of yardsticks and guidelines for assessing debt-service capacity so they are less vulnerable to unforeseen developments. While debt-service capacity has proved to be an elusive concept, experience has shown that banks cannot rely primarily on current market views in making their lending decisions.

It must be recognized, nonetheless, that even if an individual bank or group of banks based lending decisions on careful assessments of debt-servicing capabilities, sound lending decisions could still be upset if the rest of the market did not follow suit. It is imperative, therefore, to have a mechanism in place to lessen the risks that De Grauwe and Fratianni have described.

There are essentially two ways in which problems of overlending or overborrowing can be avoided. One entails greater control over the *lender,* while the other involves increased leverage over the *borrowers.* Future reforms are likely to entail both of these elements. However, the most practical and efficient route would be to influence the decisions of individual borrowers rather than the collective actions of the lenders. In particular, it is vital to expand the surveillance role of the IMF and World Bank and to increase their leverage with their member countries. This expanded role would entail these institutions compiling more timely and comprehensive information on external debt, developing suitable measures and yardsticks to assess debt-servicing capacity for individual countries, and assisting countries in their external debt management. The IMF's Executive Directors already have agreed that the Fund should be more active in counseling countries in these areas, and that the annual surveillance exercise should include a much more systematic and in-depth analysis of the external debt situation and prospects of individual countries than in the past. The ability of the Fund and the Bank to work closely with their member countries and guide them about appropriate debt levels and structures offers the surest way of providing for the financial stability and long-term economic growth of these countries.

To enhance the Fund's leverage over borrowing countries, it is also essential that the close working relationship between the Fund, the commercial banks, and central banks over the past year and a half continues to evolve. In the event that countries do not follow the advice of the Fund, it must be prepared to make its views known to the financial community, either directly to commercial banks or indirectly through the various central banks and regulatory agencies. Once the Fund's views have been conveyed, central banks and commercial banks must cooperate closely. Clearly, a major lesson of the international debt crisis is that we cannot afford to return to a situation where the commercial banks and the Fund go separate ways.

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SAFETY-NET MECHANISMS: THE CASE OF INTERNATIONAL LENDING

Gerald P. O'Driscoll, Jr. and Eugenie D. Short

Introduction

We have just emerged from the longest, and, by some measures, the most severe postwar recession. It is not surprising, therefore, that financial-sector problems have emerged. In economic downturns, certain phenomena typically occur. Included among these are sharp adjustments in risk premiums and yield-curve configurations, increases in the number of problem loans and loan losses, a rise in the number of troubled financial institutions, and a higher failure rate among financial institutions. This list in fact encompasses most of the financial difficulties experienced during the past recession. As the U.S. and world economies continue to recover, the current volume of problem loans will tend to be worked off, lessening the level of financial stress. Available evidence on credit exposure indicates, however, that, at least in the near term, the U.S. bank-failure rate will remain above the average rates established during the pre-1975 period. This suggests that current financial-sector difficulties may reflect structural as well as cyclical problems, a prognosis that raises concerns about the long-run strength and stability of the U.S. financial system.

In this paper, we hypothesize that the incentive structure provided by financial safety-net mechanisms has altered the risk preferences of U.S. financial institutions. This change, in turn, has led them to accept an excessive amount of risk. Similar changes may have occurred

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in other countries, making their financial institutions more willing to undertake undue risk, but an examination of this issue is beyond the scope of our paper. We focus on the U.S. banking system, and simplify our analysis further by concentrating on one safety-net mechanism, the system of federal deposit insurance.

Incentives provided by other financial safety-net mechanisms, including IMF lending and the lender-of-last-resort function of the Federal Reserve System, also have influenced bank decision making. In this paper, however, we analyze only the interaction of these other safety-net mechanisms with the existing federal deposit insurance system, and do not present a detailed overview of them.[1] Finally, we make no attempt here to quantify the direct impact of deposit insurance on risk taking. As designed, the safety-net mechanisms established in the United States were intended to operate interdependently, so it is difficult to determine the independent quantitative impact of each of these mechanisms. Nor is any attempt made to measure the extent to which current difficulties resulted from cyclical factors. Our intention is to analyze the impact of deposit safety-net mechanisms on banks' decisions about risk. We conclude that, by altering the manner in which risk is priced, deposit insurance heightened current financial difficulties by enabling U.S. banks to accept more credit risk than they would have accepted in the absence of this system. Within this framework, the international debt crisis is but one of several severe financial-sector difficulties that have already developed from overexposure to risk.

An Overview of Current Financial Sector Weakness

A variety of financial-sector problems has emerged during the past few years, suggesting that the U.S. financial system has become more susceptible to stress. Two problems are especially noteworthy: losses in the thrift industry and loan problems of key commercial banks. Weakness in the thrift industry was brought on by the combination of a prolonged period of high and volatile interest rates and regulations requiring thrifts to maintain a large proportion of their assets in long-term fixed-rate assets. Even though recent changes in regulations have expanded their asset powers, thrifts still have a large proportion of their assets in long-term fixed-rate mortgages. Another sharp and protracted turnaround in interest rates would again have serious consequences for most firms in that industry. Despite the cyclical character of thrift-industry problems, there is concern about the long-term viability of that industry.

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[1] For a detailed history of the lender-of-last-resort function, see Humphrey and Keleher (1984).

In addition, more attention is now being given to the new real estate lending practices of thrifts. Although fixed-rate home mortgage loans are vulnerable to large swings in interest rates, their credit risk (or risk of default) is relatively low. In contrast, much of the loan growth at thrifts during the past two years has been in areas exposed to high credit risk, like construction and land-development projects. The shift toward assumption of greater credit risk has raised concerns about the ability of thrifts to absorb potentially large losses from exposure to both interest-rate and credit risk during any future cyclical downturn.

The troubled loans held by commercial banks constitute a second noteworthy problem. In their domestic portfolios, many commercial banks have experienced severe earnings pressures from an increase in nonperforming loans, particularly energy-related credits. Two large banks already have failed primarily in response to bad energy credits: the Penn Square Bank in Oklahoma, and the First National Bank of Midland in Texas. In addition, severe earnings pressures at SeaFirst National Bank in Seattle have led to a major change in regulatory policy so that an out-of-state bank holding company (Bank America Corporation) could acquire the troubled Washington institution.

Though these domestic difficulties have received much attention, loan problems in the international area are at least equally important. All of the nation's largest multinational banks are subject to potentially severe losses from defaults on international loans. The gains in income reported by many of the nation's largest banks for1982–83 do not fully reflect temporary disruptions in interest and principal payments by international borrowers who were unable or unwilling to service their debt. The magnitude of public-sector involvement, which is already the highest since the Great Depression, underscores the severity of the foreign-debt problem. Moreover, many analysts predict that the debt burden of the major Latin American borrowers is sufficiently large to generate recurring debt-servicing problems throughout this century and possibly into the next. Are these bank loan problems merely the result of cyclical factors, or have more permanent structural changes also occurred?

Structural changes have occurred in banking. In 1975 and again in 1982, the failure rate among commercial banks jumped dramatically. The series for the postwar period is presented in Figure 1.[2] Prior to 1975, the series had no trend. Though the failure rate tended to

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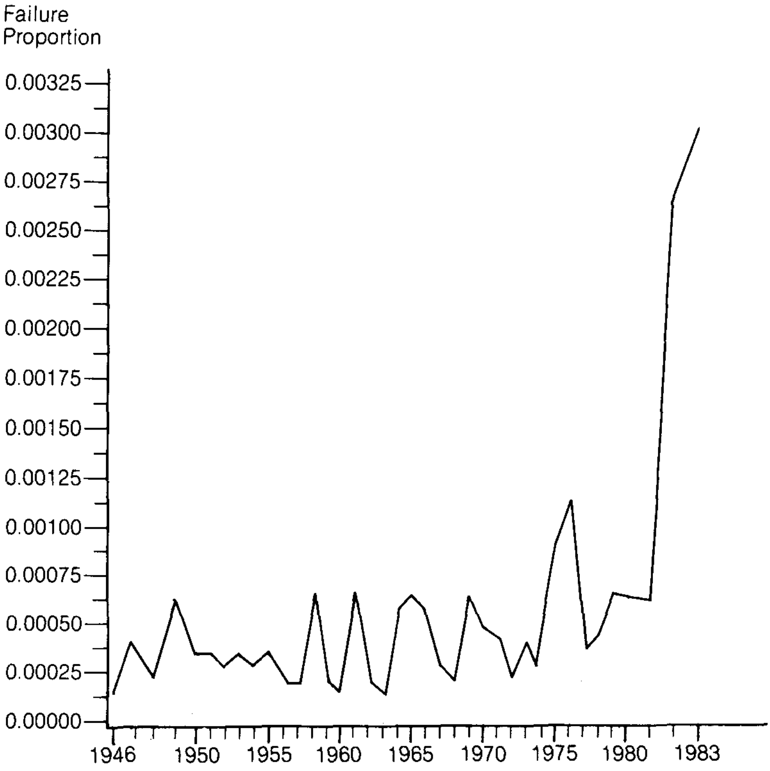
[2] Data are available from the authors upon request.

FIGURE 1

BANK FAILURES AS A PROPORTION OF NUMBER OF BANKS



Source of Primary Data: U.S. Department of Commerce, Bureau of the Census.

increase in cyclical downturns, it declined again during recovery. In 1975, it not only increased more than in earlier postwar cycles, but it did not revert to its old level. A statistically significant change in the failure rate occurred, with the rate moving to a permanently higher level. Indeed, during the three years from 1979 to 1981, the annual rate of bank failures was higher than the failure rates that developed during the five cyclical downturns prior to the 1975 cycle. The failure rate in 1982 was more than double the 1975 rate, which had set a post–World War II record. In 1983, the failure rate rose again. Though it is too early to tell if the 1982–83 rates will revert to either the post- or pre-1975 levels, these data suggest that some factors other than ordinary cyclical ones have affected the U.S. banking structure.

The International Debt Problem

Beginning in the mid-1970s, and through the international debt crisis in the summer of 1982, the international lending activity of U.S. banks was marked by two parallel developments. First, there was a major expansion of the international assets and liabilities of U.S. banks held primarily at their foreign branch offices. As indicated in Table 1, total assets of the overseas branch of U.S. banks increased from roughly $152 billion in 1974 to more than $469 billion by the end of 1982. Much of this growth resulted from expanded interbank activity. Claims on U.S. parent banks and on other foreign branches of the U.S. parents increased from $32.1 billion in 1974 to $152.7 billion in 1982, while claims on other nonrelated foreign banks increased from $60.3 billion to $133.6 billion. Comparing these changes shows that more than 60 percent of the growth in assets at the foreign branches of U.S. banks came from an increase in interbank activity. Claims on nonbank foreigners increased from $46.8 billion in 1974 to more than $109 billion by December 1982, and exposure to foreign public borrowers increased from $4.1 billion to $24.1 billion. After the emegence of the international debt crisis in mid-1982, asset growth at the foreign branches of U.S. banks slowed sharply. By the end of 1983, claims on all foreigners fell to $342 billion, a $16 billion decline from the 1982 year-end level. The bulk of this decrease came from a reduction in claims on nonrelated foreign banks, as banks reevaluated their credit exposure to nonaffiliated banks.

A second major development in the Euromarkets, which also began in the mid-1970s, was the gradual shift away from corporate loans to credits granted directly to public borrowers, or credits with public-sector guarantees. Prior to the 1982 credit crisis, loan-pricing terms in the Eurocredit markets indicated that lenders viewed credits extended to a country or public authority (or credits to a borrower with a public guarantor) as lower risks than private-sector credits. Yet it is these public-sector credits which are now the main concern. Decisions were made to price loans to public borrowers as high-quality, despite that fact that information adequate to determine the credit-worthiness of many of the foreign borrowers was not available (Schweizer and Mattle 1978, pp. 18–22).

The ability to calculate the credit-worthiness of a sovereign borrower requires information on economic, political, and socioeconomic criteria. All of the major multinational banks allocated resources to analyzing country-risk exposure. It is now generally acknowledged, however, that lending decisions frequently were made without adequate attention to these analyses. Among the Eastern

TABLE 1

BANK ASSETS OF THE FOREIGN BRANCHES OF U.S. BANKS (Billions of Dollars)

Year	Total Assets	Claims on All Foreigners	Claims on Parent Bank	Claims on Other Foreign Branches of U.S. Parent	Claims on Nonrelated Foreign Banks	Claims on Nonbank Foreigners	Claims on Public Borrowers
1974	151.9	138.7	4.5	27.6	60.3	46.8	4.1
1975	176.5	163.4	3.8	34.5	69.2	53.8	5.9
1976	219.4	204.5	4.3	46.0	83.8	64.2	10.6
1977	258.9	238.8	7.8	55.8	91.9	76.6	14.6
1978	306.8	278.1	12.8	70.3	103.1	80.9	23.7
1979	364.2	317.2	25.9	79.7	123.4	88.0	26.1
1980	401.1	355.0	20.2	77.0	146.4	103.5	28.0
1981	462.8	379.1	43.1	87.8	150.9	112.2	28.2
1982	469.4	358.3	61.6	91.1	133.6	109.4	24.1
1983	475.6	342.0	81.0	92.6	117.6	107.4	24.4

SOURCE: *Federal Reserve Bulletin*, selected issues.

European and developing countries, in particular, timely data needed to calculate the financial status of sovereign borrowers simply either were not available or were merely rough estimates of data prepared by agencies of governments involved in negotiating credit terms. Data constraints made it difficut to determine the validity of the country-risk studies. The constraints, however, did not reduce a bank's need to determine its underlying exposure to credit risk. The inattention to risk assessment by the major U.S. banks suggests that other factors were also at work altering the decision-making process at U.S. banks with respect to risk taking.

The international lending crisis is generally traced to the oil-price shock of 1973–74. The sharp adjustment in oil prices initially produced huge OPEC current-account surpluses and huge deficits in non-oil-producing countries, especially among non-oil-producing LDCs. Financial institutions, including U.S banks, became intermediaries in the financial adjustment process. As Robert Weintraub (1983a, pp. 4–5) aptly phrased it:

> The match was obvious. In the mid-1970s, banks recycled OPEC's surpluses to non-OPEC developing nations. If banks had not matched the new petro–deposits to the new credit demands of non-OPEC developing nations, if they had loaned the funds to other entities instead, some of these other entities or those to whom the funds were transferred to, further down the line, would have done the recycling.

Prior to the 1973 oil-price shock, U.S. banks had not engaged in substantial direct lending to foreign governments, except with third-party guarantees. The sheer magnitude of the oil-price increase, together with strong preferences among surplus countries to keep their funds in short-term money market instruments, imposed new demands on the process of financial intermediation. The lure of fee income, plus initially attractive interest-rate spreads, made bank participation in the recycling process appear profitable. The technique of syndicating or packaging loans made it possible for U.S. banks to participate aggressively in floating foreign loans of unprecedented magnitude. And, let it be said, public policy encouraged the process. Official support of aggressive foreign lending may have contributed to a climate in which U.S. bankers exercised less caution than they otherwise would have.

By 1978, however, the economic situation began to change. OPEC surpluses had almost disappeared. While they developed again in 1979–80 as a result of the Iranian revolution, they all but disappeared again by 1982. Borrowing demands by non-OPEC developing countries did not ebb, however, with the receding OPEC surpluses, and the banks continued to extend new lines of credit to these borrowers at narrow spreads over their cost of funds.

The data provided in Table 2 provide an overview of the distribution of the exposure of U.S. banks to foreign debt at the end of 1982. Certainly not all of this foreign debt, not even all the LDC debt, is of doubtful quality. If we look at continents, for instance, most Asian debt is generally of high quality (trouble in the Philippines notwithstanding). The major problems facing U.S. banks have been concentrated in their exposure to Eastern Euopean borrowers and to developing countries in Latin America, the same areas where data constraints made assessments of credit-worthiness particularly difficult.

TABLE 2

AMOUNTS OWED TO U.S. BANKS BY FOREIGN BORROWERS AS OF DECEMBER 1982
(Billions of Dollars)[a]

Group of Ten (G-10) Countries plus Switzerland		161.9
Other Developed Countries		38.0
Eastern Europe		5.9
OPEC Members		24.4
Non-OPEC Developing Countries		107.3
Latin American & Caribbean	70.6	
Asia	32.7	
Africa	4.0	
Offshore Banking Centers		13.2
International and Regional Organizations		0.9
TOTAL		351.6

[a] All amounts are adjusted for guarantees and indirect borrowing.

SOURCE: Federal Financial Institutions Examination Council, Country Exposure Lending Survey, 1 June 1983.

It is now broadly acknowledged that many of the loans extended by U.S. banks were used either directly or indirectly to support consumption. Other credits were extended to support public-sector investment projects, many of which have turned out not to be cost-effective. Brazil, in particular, is saddled with large state enterprises that are overmanned and unmanageable. While some of Brazil's investments are promising, others appear to be of dubious commercial value. In effect, some public-sector "investment" would be better labeled consumption. Borrowing for these purposes supported unsustainable levels of current consumption instead of providing the investment required for net increases in future consumption. If even the interest—not to mention the principal—on these debts is to be paid, real income and consumption in the overburdened borrowing nations must fall for some time.

The problems highlighted here differ among countries. Where private borrowers are involved, problems differ within countries. Despite important differences among countries, almost all of the credit problems are long term. The international debt problem is not primarily a problem of short-run liquidity. As Robert Weintraub (1983a, p. 4, n. 1) has pointed out, the short-term debt of non-OPEC LDCs in 1982 was almost matched by their short-term assets. There was a liquidity aspect to countries' debt-servicing difficulties, but this was caused by the inability of debtors to service medium- and long-term obligations. Economic recovery will ease these temporary liquidity difficulties, which are attributable to recessions. Nevertheless, the problems associated with foreign debts will be with us well into the 21st century. As the medium-term debt, which has been restructured and whose maturities have been extended, becomes due, liquidity problems will recur for some borrowers. It is this aspect of the dilemma that leads us to characterize it as a long-run concern for U.S. banks.

We have often heard it said that nations cannot go bankrupt. Nothing could be further from the truth. In fact, only comparatively recently have governmental obligations been considered the highest-quality debt. Britain established this pattern only in the 19th century, and Western democracies have generally (but not always) emulated her in the 20th. Adam Smith (1921, II, p. 471) had a sounder view of sovereign debt, not only for his time but for ours:

> When national debts have once been accumulated to a certain degree, there is scarce, I believe, a single instance of their having been fairly and completely paid. The liberation of the public revenue, if it has even been brought about at all, has always been brought about by a bankruptcy; sometimes by an avowed one, but always by a real one, though frequently by a pretended payment.

Countries make "pretended payment" by inflating, or, as Smith quaintly phrased it, by "raising the denomination of the coin." Inflationary finance can be less desirable than overt bankruptcy, because of its deleterious effects on society in general:

> A pretended payment of this kind, therefore, instead of alleviating, aggravates in most cases the loss of the creditors to the public; and without any advantage to the public, extends the calamity to a great number of other innocent people. [Smith 1921, II, p. 472]

Foreign governments, of course, cannot inflate away the real value of dollar-denominated assets. These governments, however, can erode the value of debts contracted in their respective domestic currencies. As is indicated in Table 3, this is still a common practice among Latin American Countries.

TABLE 3

PERCENT CHANGE IN CONSUMER PRICES
FROM 12 MONTHS EARLIER

Country	December 1981	December 1982	June 1983
Argentina	131.3	209.7	340.1
Brazil	91.2	97.9	112.2
Chile	9.5	24.3	32.3
Ecuador	18.0	24.4	48.2
Mexico	28.7	98.9	112.5
Peru	72.7	72.9	107.7
Venezuela	11.0	7.7	5.4
WEIGHTED AVERAGE	50.9	82.6	105.8

SOURCE: *World Financial Markets,* Morgan Guaranty Trust Company of New York, September 1983.

Only some of the acceleration in inflation rates can be explained as the effect of devaluation. It appears that these governments are attempting to cope with the burden of foreign debt by reducing the burden of their domestic debt. This strategy will accomplish little in the long run, however, if it destroys the wealth of the domestic creditor class.

Others have offered explanations of these countries' massive debts, and have examined the possible impact on LDCs of the foreign-debt burden. In this paper, however, we concentrate on why the banks were willing to extend these loans under terms that did not reflect their own exposure to risk. Systematic evidence that banks underestimated risk is, of course, difficult to adduce. Nonetheless, Edwards (1983, pp. 4–5) found that "even though international banks have taken into account some of the borrowers' characteristics, they have tended to overlook others. In that sense, the results presented in this [Edwards'] paper provide some basis to presume that the present crisis is *partially* a result of banks' lending practices."[3] Indeed,

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[3] Edwards gives more scope than we would to the role of exogenous shocks. He nonetheless notes that: "Even though these external factors indeed have had a role in the present crisis, it is important not to minimize the role of domestic policies. In particular, the fact that in most cases a large proportion of the new indebtedness was used to finance consumption should be pointed out . . ." [Edwards 1983, pp. 25–27].

Edwards (1983, p. 25) found, more specifically, that as late as 1980 (his latest data), "the international financial market had not predicted in any important way the future payment difficulties faced by Argentina, Mexico, Uruguay, and Venezuela." We look to the incentive effects of deposit safety-net mechanisms as a partial explanation for this miscalculation.

Deposit Insurance and Bank Risk Taking

Federal deposit insurance was authorized by the Banking Act of 1933 to restore public confidence in the U.S. banking system. The primary objective of deposit insurance was to maintain financial stability by forestalling deposit runs on commercial banks. This was accomplished by allaying depositor fears of capital loss from bank failure. It also satisfied a related but secondary objective of protecting small depositors from financial loss if a bank did fail.[4]

The FDIC was created as part of financial legislation to constrain risk taking by banks. Besides establishing deposit insurance, the Banking Act of 1933 prohibited banks from, among other things, underwriting corporate securities, paying interest on demand deposits, or paying interest on savings and time deposits in excess of allowed limits. These asset and liability constraints, together with restrictive chartering policies and limits to geographic expansion imposed by the McFadden Act of 1926, were intended to ensure safe banking by restraining competition and thereby reducing incentives to undertake excessive risk. It is difficult to determine whether these regulatory constraints, or sharply lowered risk preferences resulting from the dramatic increase in bank failures during the Great Depression, imposed effective constraints against excessive risk taking through at least the mid-1960s. Generally, however, analysts refer to that era as a period of binding regulatory constraints. The period from the mid-1960s through 1980 was a period of partial, de facto deregulation. Following the passage of the Monetary Control Act of 1980, the U.S. financial system entered a period of de jure deregulation.

A brief discussion of some of the financial innovations, which circumvented remaining regulatory constraints during the era of partial, de facto deregulation, helps to develop a causal link between deposit insurance and excessive risk taking. We certainly do not believe that financial innovation per se generates excessive risk taking. To the contrary, financial innovation can improve efficient capital flows, thereby making resource allocation more efficient. What we do argue is that the system of deposit insurance in the United States, together with the lender-of-last-resort function of the Federal Reserve System, have altered the pricing mechanism in the interbank market in a manner that has reduced constraints on risk taking.[5] Since this paper examines the international banking crisis, the overview of financial innovation presented here concentrates on Euromarket developments.

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[4] As Kareken (1983, p. 199) observes, current FDIC policies make little sense if protection of the small depositor were the primary objective of deposit insurance. If, however, prevention of bank runs were the primary objective, then current policies make a great deal of sense.

On the asset side, restrictions on international capital movements in the late 1960s, together with restrictions on domestic branching, played an important role in the formation of the intricate network of overseas branches established by the major U.S. banks during the 1970s. These constraints, together with tax laws, interest-rate restrictions, and reserve requirements, were key factors behind the rapid growth of the Eurodollar market and the expansion of international lending by U.S. banks (Mills and Short 1979). On the liability side, inflationary pressures induced banks to devise financial instruments paying market rates of interest to circumvent ceilings imposed by Regulation Q. Domestic rate ceilings on large certificates of deposit with maturities of 30 days or more were removed in two stages during the credit crunches of 1970 and 1973. But domestic interest-rate restrictions remained on demand deposits and on time and savings deposits of less than $100,000, as well as on large time deposits with maturities of less than 30 days. This led large multinational banks to raise a growing proportion of their short-term funds in the Euromarkets, where interest rates and deposit maturities are determined by the interplay of supply and demand rather than by national rules or regulations.

The ability to raise funds, for a price, at any maturity sharply removed bankers' concerns about obtaining adequate funding to meet loan commitments. As the size and depth of the Eurodollar market increased, concerns about liquidity were mitigated further. Moreover, by the mid-1970s, under the leadership of the European branches of U.S. banks, banks introduced the rollover credit, a variable-rate instrument that made long-term loans subject to periodic interest-rate adjustments. The rollover credit became the primary source of business financing by commercial banks in the Euromarkets.

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[5] The current system of pricing deposit insurance transforms the role of the lender of last resort. Thus the FDIC's pricing policy is a necessary condition for reducing constraints on risk taking, and this policy, together with current lender-of-last-resort policies, are sufficient conditions for a reduction in constraints on risk taking. In this sense, the current system of deposit insurance adds to rather than relieves pressure on the lender of last resort.

Prior to the mid-1970s, international borrowers had relied primarily on capital markets to satisfy their medium and longer-term borrowing requirements. Variable-rate pricing techniques, together with the development of the loan syndication process, provided the basis for active bank participation in financing medium- and long-term loans. By directly linking interest rates on assets and liabilities with different maturity structures, the development of the rollover credit greatly reduced bankers' concerns about exposure to interest-rate risk.

The London Interbank Offered Rate (LIBOR) provided the underlying rate of interest on rollover Eurocredits. LIBOR is the rate at which three- or six-month money is offered by the leading London banks to other banks. Actual borrowing rates exceed LIBOR by specified margins or spreads, determined by competitive pressures among participating banks.

The decision to participate in large Euro-syndicated loans depends critically on the assumption that an adequate interest-rate margin be preserved on each loan throughout its term. The average cost of funds paid by the reference banks in a syndicated Eurocredit determines the base borrowing rate. The margin or spread over the base rate reflects the lenders' assessments of the borrower's credit risk. In determining whether to participate in a syndicated loan, each individual bank must judge whether the established margin adequately covers the credit risk. In addition, to preserve the margin on the credit, each participating bank must be able to continue to bid for funds throughout the term of the loan at a rate comparable to the average rate paid by the reference banks. Over time, bankers gained confidence that, at each rollover date, they would be able to obtain adequate funding at an interest rate preserving the margin established on the loan. Reduced concerns about liquidity constraints was a key motivating factor behind the sharp increase in U.S. bank participation in medium- to long-term financing to international borrowers.

The volume of syndicated loans made by banks of various sizes and origins, in both the domestic and international arena, increased sharply. Competitive pressures frequently reduced spreads over funding costs to as low as three-eighths of a percentage point on major Eurocredits. Such spreads would result in negative margins if differential pricing adjustments on deposits of as little as one-half of a percentage point developed among participating banks. Although risk premiums of such magnitudes are not uncommon among nonbank borrowers with different risk characteristics, such diffferentials have been rare in the interbank market.

Under normal conditions, major U.S. banks have been able to raise funds at roughly uniform rates in both the domestic and international money markets. Moreover, rate differentials between the large multinational banks and the major regionals have been small. This has enabled banks of different sizes to participate in the same loans. Differential pricing adjustments on bank deposits do occur, but significant adjustments develop only *after* problems of crisis proportions have emerged. During financial crises, when the probability of bank failure is sharply heightened, interest-rate differentials on bank deposits widen. Banks deemed to have higher exposure to risk pay more for funds and, in some instances, deposit outflows from those banks cause liquidity problems. It must be underscored, however, that the emergence of sharply graduated or "tiered" interest-rate structures is an unusual development in the interbank market. During the past decade, large interest-rate differentials developed after the German Herstatt Bank failed in the summer of 1974. Similarly, concerns about excessive exposure to problem credits have created funding problems at several U.S. banks during the latest period of financial stress. Interest-rate tiering on bank deposits only occurs after information emerges that a bank, or group of banks is sufficiently overexposed to risk that failure is probable. In other words, pricing adjustments in the interbank market tend to take place in an ex post rather than in an ex ante fashion.

The development of unquestioned confidence among depositors in the ability of financial-sector safety-net mechanisms to prevent unexpected losses from bank failure appears to have played a significant role in altering pricing in the interbank market. Specifically, the existence of deposit insurance, and the manner in which the existing deposit insurance system operates, reduces the incentives for depositors to require risk-related premiums on bank deposits.

Within the current framework, domestic deposits at FDIC-insured banks are legally protected up to $100,000. To provide this coverage, the FDIC charges a fixed-rate premium of one-twelfth of one percent of all domestic deposits at each insured institution. Legally, then, domestic deposits held in excess of $100,000 at a single institution are not covered by FDIC insurance; nor are the deposits held at the foreign branches of U.S. banks. In practice, however, the manner in which bank failures have been settled by the FDIC has provided de facto 100-percent coverage to all domestic depositors. Over time, uninsured depositors have become increasingly confident that existing deposit safety-net mechanisms, including the availability of discount window borrowing for banks facing funding constraints, would provide adequate time for them to remove their funds from troubled institutions before incurring financial loss. This perception also has reduced concerns about the financial exposure of Eurocurrency depositors.

Since the FDIC began operations, most bank failures and, until Penn Square Bank failed, all large bank failures, were settled with a purchase and assumption (P&A) transaction. In a P&A transaction, the FDIC transfers all the liabilities of a failed bank to the assuming (acquiring) bank. If accomplished overnight, a P&A transaction avoids any interruption in the availability of funds to a domestic depositor. Until Penn Square, P&A was always used in recent times to settle claims for larger institutions. Depositors were paid off only in failures of some smaller institutions. Only in those cases were depositors with accounts in excess of $100,000 at risk.

By leaving large depositors partially at risk, the FDIC's handling of the Penn Square Bank failure introduced some uncertainty into the bank deposit market. Penn Square involved potentially severe litigation that precluded assumption by another bank. When the First National Bank of Midland failed with over $1 billion in assets, however, the FDIC reverted to its P&A policy. Large depositors therefore still have good reason to believe that the probability of loss from bank failure is very low.[6]

Reduced concern about financial loss from bank failure has also spilled over to the international deposit markets. The deposits of the foreign branches of U.S. banks are not FDIC-insured, and the U.S. parent bank is not legally bound to cover losses incurred by the depositors of its foreign branches. By the late 1970s, however, the temporary effects of the Herstatt Bank failure on interest rates had passed, and risk premiums between the domestic and Eurocurrency deposits of U.S. banks virtually disappeared. After the 1982 debt crisis surfaced, interest-rate differentials consistent with the existence of risk premiums again emerged (cf. Kreicher 1982). It is only after problems of major proportions emerge, however, that significant risk premiums are required by uninsured bank depositors.

Depositors, including large uninsured depositors, perceive that the probability of financial loss from bank failure is minimal. This perception delays the timing and dampens the magnitude of interest-rate adjustments that would normally occur in money markets. Similarly, the interplay between the system of deposit insurance and the lender-of-last-resort function has sharply reduced bankers' concerns about their ability to obtain adequate funding at profitable interest rates. In the event that deposit outflows generate liquidity problems, a constrained bank is able to meet its funding commitments by borrowing from the Federal Reserve's discount window. The net result of this process, which has evolved over time, is that day-to-day pricing adjustments in the domestic and international money markets have not imposed adequate constraints on bank risk taking. By reducing the market discipline that would normally be imposed by differential pricing on bank deposits, these safety-net mechanisms temporarily reduce the cost of risk taking. This enables the banks to undertake more risk. The cost reduction is only temporary, however, as the opportunity cost of assuming excessive risk is revealed once a borrower is no longer able to service his debt. As long as the risk-assuming institution is subject to losses from its exposure to risk, the cost of undertaking excessive exposure to risk will eventually be revealed. By altering the manner in which risk is priced, however, safety-net mechanisms have distorted the day-to-day signals being sent to banks about the magnitude of their risk exposure.

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[6] The FDIC (1983, chap. 1, p.1) itself observes that:

> Since the FDIC began operations, some portion of failed bank situations have been handled in ways that have provided *de facto* 100 percent insurance coverage to all depositors and general creditors. . . . Especially in large banks, there probably is the perception among depositors of minimal risk of loss, and therefore there are few incentives to choose between banks based on financial condition.

In sharp contrast to other financial markets, the bank deposit market reacts after the fact to events that have altered the risk/return situation facing bank decision makers. Instead of risk being continually repriced to the accompaniment of deposit flows at the margin, there is a comparatively sudden and massive movement of uninsured funds from banks whose probability of failure is high. By diminishing the incentives of depositors to monitor the performance of the banks in which they maintain their funds, deposit safety-net mechanisms, including deposit insurance, have encouraged banks to assume more risk than they otherwise would have assumed. In so doing, banks generate a negative externality, one known in the economics literature as "moral hazard."[7]

The moral hazard problem we identify is not a necessary outcome of the provision of deposit insurance, but it is generated by the manner in which the deposit insurance is priced and provided. By relying on the P&A transaction to settle failed banks, and by charging a fixed-rate premium for coverage without regard to the risk exposure of the covered institution, the existing system of deposit insurance contributes to current difficulties. Short and O'Driscoll (1983) have addressed the issue of deposit-insurance reform, and have presented a transition proposal for moving toward a system of private deposit insurance. By removing the subsidies to risk taking currently provided by deposit insurance coverage, this reform would also begin to address the difficulties resulting from previous overexposure to credit risk in the international arena.

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[7] Moral hazard describes a situation in which the provision of insurance increases the probability that the event insured against will occur. For instance, the provision of fire insurance may increase the incidence of fires. In some cases, arsonists may exploit situations in which structures are insured for more than their market value. More generally, those protected by insurance face reduced incentives to avoid fires. The insurance company bears most of the risk of loss. See Arrow (1971 pp. 142–43).

A Transition Proposal for Competitive Deposit Insurance

The specifics of our proposal for a transition to a system of competitive deposit insurance are presented in this section.[8] Our commitment is to the goal of competitive pricing of deposit insurance, not to the specific transition proposal presented here. Nonetheless, this proposal has the advantage of not interrupting the present system of deposit insurance. The FDIC would continue to provide basic deposit insurance while private capital is attracted to the industry. Once the transition is completed, the FDIC would continue supplying deposit insurance as one among a number of competitors.

To reach a system of private deposit insurance, we offer the following four policy recommendations:

1. Eliminate de facto coverage of deposits above statutory limits, reduce coverage limits, and introduce some form of coinsurance.
2. Eliminate the statutory requirement that nationally chartered and state-chartered member banks, as well as banks associated with bank holding companies, purchase deposit insurance from the FDIC.
3. Impose a requirement that the FDIC utilize the best available information to determine risk categories; and that these risk classifications be used to set premiums that minimize cross-subsidization among risk categories.
4. Impose a requirement that the FDIC cover costs plus earn a reasonable return on capital.

The first recommended change, which is perhaps the most important, is needed to attract private firms to the deposit-insurance business. The policy of providing de facto 100–percent coverage to all depositors has lessened market discipline on banks by minimizing depositors' fears of loss. It has also effectively precluded a market for excess deposit insurance. Excess insurance would be insurance coverage over and above the limits of the basic policy. The market for excess coverage is the most likely place for private competitors to enter. The scope for competitive entry would be increased by lowering the maximum deposit covered by the FDIC. In offering excess coverage, private insurers would price insurance to reflect expected losses, so risk would be priced on the margin. Basic FDIC coverage should also be altered to include some form of coinsurance.[9] If, for example, coverage could be reduced to 80 percent of losses, this too would reduce moral hazard by encouraging risk to be priced more accurately at the margin.

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[8] This section draws heavily from Short and O'Driscoll (1983).

After substantial experience with excess coverage, some companies might choose to compete with the FDIC in providing minimum or basic insurance for depositors. Our second policy recommendation would have to be adopted to open the market for basic insurance coverage. At present, private deposit insurance is not prohibited by any federal or state statute, but most banks are required to purchase FDIC insurance. If broad-based coverage by private insurers is desired, this requirement would have to be lifted. When coupled with the FDIC's de facto provision of 100-percent coverage, there is little reason at present for banks to be interested in private insurance.

The third recommendation is motivated by the FDIC's reluctance to use information gained in the examination process when setting insurance premiums. Some of the FDIC's concerns in this regard are meritorious, but the best available information about risk characteristics is needed to price risk accurately. As Short and O'Driscoll (1983, pp. 18–20) argue, better information on risks is needed to reduce cross-subsidization among different risk classifications.[10]

The fourth recommendation is intended to make competition feasible for both basic and excess deposit-insurance coverage. The experience of public utility regulation suggests that determining what is a "normal" or "necessary" return on capital presents severe problems. Nevertheless, some thought must be given to the rate of return required on FDIC insurance operations. If the rate of return is set too low, the FDIC's pricing would preclude entry. If the rate of return is set too high, the FDIC's rates would act as an "umbrella" protecting private competitors. Entry would be restricted in the first case, while in the latter case, high short-run private returns would lead to excessive long-run entry.

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[9] Because of the growing importance of money brokers, it is not sufficient to lower coverage. As Short and O'Driscoll (1983, p. 18) note, these brokers can economically bundle accounts as low as $1,000 into $100,000 lots, thus earning both higher interest and FDIC insurance protection.

[10] Cross-subsidization occurs if insurance premiums do not fully compensate the insurer for losses incurred within a given risk category.

The suggested changes could be implemented by using, as a transition model, the current system of pricing check-clearing services. In the Monetary Control Act of 1980, Congress mandated that the Federal Reserve System price its services, including check clearing, with the aim of promoting competition with private firms. Federal Reserve Banks have had to identify costs directly attributable to clearing checks, and they are required to earn a reasonable rate of return on imputed capital.

The judgment of Federal Reserve Banks about their relevant costs has not gone unchallenged, but the cost analysis used thus far has withstood criticism. As Frodin (1984) demonstrates, vigorous competition has developed in the area. The criteria and operating procedures used by Federal Reserve Banks can be expected to change in response to these competitive pressures, and have already done so in some respect. Any arbitrariness in cost and profit criteria can be reduced over time, as evidence accumulates about competitive practices in the industry. The same process would operate for the FDIC and other deposit insurers.

Our proposal goes further than the FDIC's own program in implementing the goal of pricing risk. The FDIC is concerned about the inequities and misallocations that can be generated by inappropriately pricing risk. Their proposal does not, however, adequately address these problems. Without a profit-and-loss test, all that can be determined is whether risk has been severely underpriced, and this can only be revealed after the fact and at great cost. If there is an institutional bias, it is toward underpricing risk. For this reason and others, we recommend that a system of competitive deposit insurance be implemented.

Conclusion

Our main focus has been to explain how the incentive structure provided by one public safety net contributed to the world debt crisis. Although we presented some brief evidence on the dimensions of the problem, we were interested not in demonstrating its severity but in analyzing its causes. We are by no means suggesting that there is a unique cause, or that any one policy action or set of actions will preclude a similar crisis from occurring in the future. We believe, however, that financial safety-net mechanisms played an important role in the present crisis. In particular, the present system of deposit insurance provided institutions with strong incentives to undertake undue risk. Because of the way in which the FDIC administers deposit insurance, even large depositors at U.S. banks and their foreign branches perceive that their funds are not at risk. This has reduced incentives for depositors to demand risk premiums on bank deposits commensurate with the risk exposure of the bank. The lack of market discipline enabled banks to assume more risk than would otherwise have occurred.

The world-debt problem, along with problems from energy-related loans and the excess exposure of thrifts to interest-rate risk, are reflections of the incentive effects of public policy, including existing statutes on deposit insurance. If reform of deposit insurance is not implemented, we can only speculate on what problems will be added to those already mentioned.

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INTERNATIONAL LENDING AND THE ECONOMIC ENVIRONMENT

Anna J. Schwartz

The paper by O'Driscoll and Short argues that public safety-net mechanisms "played an important role in the present crisis" (p. 203) of international lending.[1] The one mechanism they explore, apart from a passing reference to other financial safety-net mechanisms including IMF lending and the Federal Reserve System's lender-of-last-resort function, is the present system of deposit insurance. They argue that deposit insurance encourages banks "to accept more credit risk than they would have accepted in the absence of this system" (p. 186), and that international debt problems are only one of several sets of financial sector difficulties attributable to overexposure to risk.

I believe O'Driscoll and Short's analysis of the moral hazard problem that the present system of deposit insurance generates is sound. Excessive risk that in retrospect the banks undertook, however, is only indirectly related to the effects of deposit insurance in my view. The banks' behavior is more immediately related to their projection of a continuation of inflation and their failure to foresee the change in circumstances they and the borrowers would face should world economic activity contract with a fall in U.S. inflation rates. An essential ingredient missing in the paper is the economic environment in which the international loans were extended and came to grief.

Let me first summarize in greater detail the argument of the paper before turning to the reasons that lead me to question its conclusion. The paper includes four sections. In the first one, the authors review areas of current financial sector weakness, including the plight of thrift institutions and domestic and international loans of key

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[1] Gerald P. O'Driscoll, Jr. and Eugenie D. Short, "Safety-Net Mechanisms: The Case of International Lending," *Cato Institute* 4 (Spring/Summer 1984): 185–204.

commercial banks. They cite the rise in the failure rate of commercial banks since 1975 as evidence of a permanent structural change rather than ordinary cyclical factors affecting the U.S. banking system.

In the second section, the authors briefly review the dimensions of the international debt problem. They note the expansion from the mid-1970s to mid-1982 of international assets and liabilities of U.S. banks held primarily at their foreign branch offices, a shift from private to public sector lending in Euromarkets, and the rating of public sector borrowers as lower-risk, despite the inadequacy of information to determine their credit-worthiness. The authors regard the cavalier treatment of risk assessment as an indication of an alteration in "the decision-making process at U.S. banks with respect to risk taking" (p. 191). The assumption is that it was deposit insurance that produced the alteration in the decision-making process, but I would argue that it was rather the inflationary environment.

Although the authors acknowledge that "Official support of aggressive foreign lending may have contributed to a climate in which U.S. bankers exercised less caution than they otherwise would have" (p. 191), in the main, they "look to the incentive effects of deposit safety-net mechanisms" (p. 195) to explain the banks' miscalculation in continuing to extend loans to non-OPEC developing countries when by 1978 OPEC surpluses were shrinking. The loans directly or indirectly supported consumption or dubious public-sector investment projects that were in effect also loans for consumption. Servicing the debt presents problems for the borrowers to the extent that the loans were not used productively. These are long-term problems because the liquidity problems will recur for borrowers whose medium- and long-term debt maturities have been extended. Latin American governments have resorted to inflation to erode the value of debts contracted in domestic currencies, possibly as an offset to the burden of their U.S. dollar debt that cannot be reduced in real value by such inflation. An unintended consequence of domestic inflation, the authors note, may be the destruction of the wealth of domestic creditors.

In the third section, to account for the systematic underestimation of risk in international lending by U.S. banks, the authors focus on the role of the banks' circumvention of regulatory restrictions. To restrain risk taking, in the past the FDIC relied on entry restrictions, limitations on costs through Regulation Q, and asset restrictions through the separation of commercial from investment banking.

However, the banks found ways to escape the restrictions. The paper makes a useful contribution in reviewing the devices the banks innovated. In particular, in response to capital controls and domestic branching restrictions, major U.S. banks established a network of overseas branches during the 1970s. Tax laws, interest rate restrictions, and reserve requirements led to the growth of the Eurodollar market and the expansion of international lending by U.S. banks. Because of Regulation Q, large multinational banks turned increasingly to Euromarkets for financing, since interest rates and deposit maturities there were market determined. Concerns about liquidity constraints diminished as the banks were able to raise funds for a price at any maturity. The financial innovation of the rollover credit, a credit variable rate tied to the London Interbank Offered Rate at which banks borrowed, enabled them to limit exposure to interest-rate risk. The spread between interest rates on their assets and the interest rates on their liabilities with different maturity structures induced banks to participate in large Euro-syndicated credits. Although large multinational banks and regional banks normally pay uniform rates on the funds they raise in both the domestic and international interbank markets, significant differences appear only after a crisis develops.

The authors' explanation for the characteristic uniform pricing of deposits in the interbank market seems to me correct. It is that financial safety-net mechanisms will prevent unexpected losses from bank failures. The mechanisms also reduce the incentives for depositors to require risk-related premiums on bank deposits. Depositors have no incentive to place deposits only with prudently managed banks, since deposit insurance makes less prudently managed banks equally safe for depositors. Banks in turn need not be concerned with the possibility of deposit outflow.

In the new deregulated environment, continued subsidies by deposit insurance to risk taking contribute to the increase in bank failures. In effect the FDIC subsidizes risk taking by covered banks, freeing depositors from the responsibility to monitor the soundness of banks, and fostering instability in the banking system, at the ultimate expense of taxpayers. Moral hazard is the upshot. Moral hazard arises because the FDIC transfers all the liabilities of a failed bank to an acquiring bank with no interruption in availability of funds to a domestic depositor and charges a fixed rate premium for coverage without regard to the risk exposure of the covered institution.

In the final section of the paper, the authors review changes that they have proposed now that the FDIC no longer can rely on restrictions on bank behavior to restrain risk taking. Under their recommendation, to attain competitive provision of deposit insurance by private firms, risk would be priced, with competition offering a profit-

and-loss test that insurance risk covering deposits has been appropriately priced.

Having summarized the contents of the paper, let me turn to the basic problem that I find with it. Is it the effect of deposit insurance that accounts for the plight of thrift institutions and the troubled energy-related credits and international debt portfolio of large commercial banks? The plight of thrifts, I believe, is more directly related to the regulations under which they operated and the gathering inflation since the mid-1960s. Limited by regulation with respect to certain asset categories, limited by regulation with respect to the interest they could pay on shares—as deposits at thrifts were known—thrifts were not meant to operate in an environment in which interest rates included a growing inflation component. The institutions were hemmed in with long-term low-interest-rate mortgages and short-term sources of funds that leaked away from them as markets offered competitive rates. The thrifts could not afford to pay competitive rates even if permitted by the regulators. I do not believe the example of the thrifts can be cited in support of the argument that the current deposit insurance system provides incentives for excessive risk taking. If anything, the example of the thrifts supports the argument for deregulation and for a stable monetary system.

What about the international debts of commercial banks? Can they be directly linked to the effects of the deposit insurance system? Now we know that it is not only large U.S. banks that have underestimated interest rate risk and credit risk on their international loans. English, German, Japanese, and Swiss banks are also in the same boat. It has been reported that the English provide partial deposit insurance, but none of the other countries do. We also know that at other times what turned out to be imprudent foreign loans, as in the late 19th century, were made by English banks to Latin American countries and in the 1920s by U.S. banks to a varied group of countries. These loans were extended before deposit insurance existed. Does this record prove that excessive risk taking was responsible? I believe that a case can be made for the banks in the 1920s: Ex ante they evaluated risk adequately by charging higher interest rates on more risky loans. Ex post, in a world in depression, the loans turned out to be imprudent.

The authors cite the crumbling of regulation after 1974 as removing constraints that formerly restricted U.S. banks. Clearly, however, the crumbling of regulation occurred because inflation stimulated financial innovation and technological changes that led to de jure deregulation. It was not the availability of deposit insurance that accounts for that result. Given the sorry record of attempts to curb inflation since the mid-1960s, it is not hard to credit the banks' belief that inflation would be the dominant influence on world economic developments over the short-run maturity of most foreign loans that they extended in the late 1970s and early 1980s. The same belief applied to energy-related credits. The banks turned out to have been wrong. That it was deposit insurance that led them to entertain such a belief also strikes me as less obvious than it is to the authors.

Finally, what explains the low bank failure rate in most of the post-World War II period—regulatory restriction or a relatively stable economy with a low inflation rate? In my view, the explanation is the condition of the economy. Bank failure rates may well decline to match earlier postwar levels if we can restore a stable economy and eliminate high and variable inflation rates.

Nevertheless, reform of the deposit insurance system is desirable and I applaud the recommendations that O'Driscoll and Short have made to that end. In short, the paper is a first-rate analysis of the shortcomings of the present deposit insurance system, but I doubt that it adequately explains why large banks in the industrialized world now have problems collecting interest on and the principal of the loans they made to foreign governments and firms.

THE POLITICS OF IMF LENDING

Fred L. Smith, Jr.

> *The world's structure of trade and finance is immensely productive, but it is not stable. It does not balance itself. It has to be managed.*
>
> *Washington Post* (25 July 1983)

> *If the IMF were out of the picture . . . the banks would arrange their own rescheduling of debts, as they do with domestic borrowers in trouble.*
>
> Milton Friedman (3 November 1983)

I. Introduction

The 1983 debate over increasing the funding of the International Monetary Fund (IMF) reflects the basic conflict between the above two views. One school, as exemplified by the first quote, sees the market as a fragile institution requiring the guidance of an impartial and objective government referee to enforce order and stability. The alternative view sees the market as both more robust and far more able to correct world financial problems than a political institution. The former views government as a positive force for good in an otherwise self-centered universe; the latter sees government as merely another forum in which self-interest operates, but one that lacks many of the corrective feedback mechanisms of the marketplace. To the former, government is the solution; to the latter, it is the problem.

The theme of this paper is that a significant change is occurring in the way foreign economic assistance programs are viewed. This change is overdue and parallels a similar reassessment of domestic economic policies. These trends are likely to strengthen the arguments and

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political effectiveness of the array of forces that came to oppose the IMF in 1983.[1] Those favoring increased government-to-government assistance face an increasingly difficult, and I would argue ultimately hopeless, task. As Tom Bethel (1983) has noted: "[T]he IMF is doomed . . . because it has either failed to grasp, or it dare not acknowledge, that capitalism and socialism are not equally effective methods of economic growth." The following sections develop this theme.

Section II provides a brief history of the IMF's financial-management role from its creation at the Bretton Woods conference in 1944 to today. Section III addresses the question of whether the IMF as a political institution is the most effective means of managing the world financial system. The fourth section addresses the advisability of obtaining credit-assessment advice from private firms such as Moody's and Standard & Poor's rather than the IMF. The fifth and central section of the paper addresses the specific arguments raised in the recent legislative debate over whether the United States should increase its quota to the IMF. Section VI provides an overview of the various means used by the opponents of the IMF funding increase to influence the policy debate. Section VII offers some concluding remarks.

II. A Brief History of the IMF and Its Legislative Trials

The IMF was established along with the World Bank and the General Agreement on Tariffs and Trade (GATT) at the close of World War II. The World Bank was to assist the recovery of the war-ravaged economies of the world while GATT was to ensure an orderly and rapid development of world trade. The IMF was intended to develop and enforce "an orderly code of conduct in international trade and financial matters." The IMF adopted a code that aimed at stable exchange rates with adjustments beyond some flexibility range restricted to situations where a "fundamental disequilibrium" had occurred. The IMF was prepared to extend financial assistance when necessary to ensure that a nation was able to adhere to these policies "while correcting or avoiding payment imbalances." In effect the IMF was to manage a world system of fixed exchange rates.[2]

The belief that this management function was necessary and should be performed by a political organization rather than the market was automatic. At that time the prevailing wisdom held that government involvement was essential to economic development. Peter Brimelow (1983) recently characterized that mood:

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[1] For confirmation of this view, see Madison (1983).

[2] This review is based in part upon Hooke (1982).

> The fundamental assumption underlying the IMF is that free markets can be improved by enlightened intervention. At the time of Bretton Woods [1944] this assumption dominated virtually every aspect of economic policy. Now international economics is one of its few unchallenged refuges.

Since 1944 much has been learned about the stability of the market and the efficacy of government intervention. Many policy analysts—and even some economists—are beginning to appreciate the strengths of the market. Moreover recent empirical work on the effectiveness of governmental regulatory agencies has provided a more realistic assessment of the ability of political institutions to outperform the market.

In any event these early rationales for the IMF were considerably weakened when the world went to market-determined, or floating, exchange rates in the early 1970s. These changes, according to Milton Friedman (1983a, p. 72), eliminated any need for the IMF: "It really has no reason to exist. But, of course, no government or international agency ever goes out of existence, if it can help it." Friedman went on to note that the IMF has increasingly come to see itself as the "world central bank." The existence of an IMF ready to reverse or delay market changes in exchange rates undermines the ability of the market to play its financial stabilization role. Evidence for such concern arises from government attempts to regulate housing and energy prices over the last several decades. For obvious political reasons, government is poorly equipped to substitute for the market.

Logic notwithstanding, the IMF did indeed survive and continue to lend. The rationale for a continued role was that IMF lending "facilitated" exchange rate adjustments. Thus, although the market would determine exchange rates, IMF lending would moderate the rate and extent of these adjustments. That the experts of the IMF would prove superior to the market in managing exchange-rate fluctuations was viewed as self-evident.

In other areas relating to the IMF, however, conventional wisdom was being questioned. The IMF's difficulties with the U.S. Congress first began in 1978, when the IMF sought approval of a new temporary lending authority—the Supplemental Financing Facility. During the floor debate, Congressman Thomas R. Harkin (D–Iowa), a human-rights advocate, introduced successfully an amendment that would have prohibited IMF lending to any nation that violated the human rights of its citizens. After that provision was struck from the bill in the Senate, though, Harkin voted against the measure and persuaded some 25 other congressmen to follow his lead. The IMF did obtain its supplemental financing, but it also became a topic of legitimate debate.[3]

In 1980 the IMF returned to Congress to request a permanent quota increase. The House had moved right since 1978, and this time a group of fiscally conservative congressmen joined with Congressman Harkin to oppose the increase. During the debate, Congressman Harkin (1981) sent out a "Dear Colleague" letter to some 50 liberal congressmen, which led off with the question "How would you like to cast a fiscally conservative vote and feel good about it?" The letter identified the IMF as the opportunity for such a vote and asked each of the addressees to oppose the increase. Other opponents of the increase included such tax-reduction advocates as Congressmen Andrew Jacobs, Jr. (D–Ind.), as well as such Republican house leaders as Jack Kemp (R–N.Y.) and then-Congressman David A. Stockman (R–Mich.). Stockman (1980) noted:

> This [the IMF quota increase] is bad legislation. . . . [P]roponents argue that the IMF needs this increase to help prevent economies in the Third World from collapsing under the burden of excessive external debt. . . . But the IMF does not have a record of success in strengthening unstable economies in the Third World. Indeed it has been counterproductive.

Fiscal conservatives viewed the IMF as a poor manager of international credit and sought to block the increase. Conservatives thought the economic rights of the citizens of the world should also receive protection. Although Congress nevertheless approved the IMF increase, the margin of victory was substantially reduced. The IMF bill won by 199 to 151, a difference of only 48 votes. Defeating the IMF began to look like a feasible objective.

The 1980 electoral victory of the Reagan campaign suggested greater difficulties for future IMF funding. IMF critic David Stockman was given the key role of director of the Office of Management and Budget (OMB). In addition President Reagan's initial remarks on the topic (1981) suggested a difficult time for any new IMF funding proposal: "[U]nless a nation puts its own financial and economic house in order by providing economic incentives and commercial opportunities, no amount of aid will produce progress."

This emphasis on the domestic policies and institutions of a nation was novel and significant. Reagan's identification of private property, entrepreneurial profits, and market freedoms as essential prerequisites to economic growth boded ill for the IMF, since the established policy of the IMF had been to treat as irrelevant a nation's economic policies. It was inevitable of course that the IMF would have maintained such a neutral position, because many of the IMF members were fervent supporters of planned economies, opponents of private property, and so forth. Nonetheless the president's words suggested that he viewed such neutrality as suspect and thus that he would question any effort to expand the IMF's role.

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[3] The 1980 IMF policy debate description is based on discussions with Mark Hulbert who participated in that debate. See also Hulbert (1983).

Nor did the Reagan administration abandon this position immediately. According to an account in the *Wall Street Journal* (Pines 1983), Treasury Secretary Donald Regan remained opposed throughout most of 1982 to any increased IMF funding. During this early period, Regan argued that any move to expand IMF funding would only encourage lax lending. His shift in attitude was apparently triggered by the Mexican financial crisis of the autumn of 1982. Regan and others within the administration may well have realized that the IMF had encouraged the Mexican problem, but they were not willing to face the economic and political consequences of allowing the market to resolve the problem.

For whatever reason, the administration did shift decisively. By September 1983, in the midst of the IMF debate, President Reagan (1983) was enthusiastically endorsing the IMF as the "critical linchpin of the world economy," even though he continued to caution that in the absence of responsible domestic policies, "all the aid in the world will be no more than money down the drain."[4] However, only the rhetorical elements of the original policy had been preserved. The IMF had neither the ability nor the will to critique the institutional arrangements of the debtor countries. Socialism might be a major cause of world poverty, but the IMF was not the agency to communicate that fact.

The IMF legislative debate occupied the period from April to November of 1983.[5] In early April the Senate authorized increased IMF funding by a vote of 55 to 34. When the bill reached the House, where opposition to the IMF had always been greater, the debate intensified. By July the efforts of the Citizens' Coalition Against the IMF Increase—an ad hoc working group of environmentalist, church, conservative, taxpayer, and free-market organizations—had begun to threaten the prospects for enactment of the measure. In response the administration mounted a major legislative lobbying effort, and in August it succeeded in persuading the House to enact a compromise authorization bill by the narrow vote of 217 to 211. The 48-vote margin of victory in 1980 had been slashed to a scant 6-vote cliffhanger in 1983.

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[4] In his remarks to the IMF/World Bank leadership on 27 September 1983, President Reagan said: "It [American aid] must be considered a complement to, not a substitute for, sound policies at home. If policies are sound, financing can be beneficial. If policies are irresponsible, all the aid in the world will be no more than money down the drain."

[5] This chronology is taken from the author's own involvement in the IMF policy debate supplemented by the daily accounts of the period in the *Wall Street Journal*, *New York Times*, *Washington Times*, and *Washington Post*.

But even then the fight continued, for Congress still had to reconcile the Senate and House versions of the bill. Moreover two additional problems emerged. First, over the opposition of the administration, the House bill had been amended to prohibit IMF loans to communist nations. Republican activists had noted that vote and had sent letters to selected voters in some of the districts where Democrats had voted against that provision. Congressman David R. Obey (D–Wis.), among those targeted, was angered by this move and he promised to block any IMF approval until the White House made it clear that his vote had the backing of the administration. A second problem emerged when Congressman Fernand J. St. Germain (D–R.I.), chairman of the House Banking Committee and an IMF supporter, decided to link any further action on the IMF legislation to passage of a housing bill. Housing legislation had been deadlocked for a number of years and had not been looked upon favorably by the administration. The administration's obvious desire for an IMF bill made it vulnerable to such logrolling tactics.

The administration, however, eventually finessed the anticommunism issue with a conciliatory letter and caved in on the housing bill. The combined bill was a "procedural mess" but did succeed in attracting enough votes in the Senate and House to gain approval. The linkage of the IMF increase to the housing bill made the final vote impossible to compare with earlier IMF votes. Senator Gordon Humphrey (R–N.H.), however, was able to force a vote on one floor amendment to reduce the IMF funding level. That amendment was defeated 52 to 45, which suggested further erosion of IMF support within the Senate.

The final IMF bill includes little substantive reform; thus its supporters can legitimately claim an impressive victory. The trends, though, suggest that the "good manager" image of the IMF is weakening rapidly. Moreover, as noted in a postmortem report in *The Economist Financial Report* (1983), "The damage has been done; it [the emergence of major opposition to the IMF] has cast doubts about the American interest in international affairs." While the view that a reduced government presence in the world economy amounts to neo-isolationism should be rejected, the general tenor of the remark is accurate. Proponents of government-dominated foreign economic assistance have much to worry about.

III. The Political Nature of the IMF

That the IMF's fate has rested with the political process has been totally appropriate, for the IMF is itself a political institution. It is managed by politically appointed individuals from member nations, and the political interests of its members influence its decisions. Within this framework the general functioning of the IMF is straightforward. A debtor nation calls upon the IMF when it discovers or anticipates a foreign-exchange shortage. This shortage may have resulted because of some exogenous shock to that nation's economy—an increase in the price of energy, for example, or a sudden drop in the price of one of its key export commodities. Or it may reflect careless or wasteful governmental policies. Whatever the reason for the shortage, the IMF then sends a mission to determine what steps the nation should take to regain its economic health—or more properly its ability to repay its foreign obligations. These steps are then codified in a so-called conditionality agreement. If the debtor nation accepts the management advice of the IMF, it gets a direct IMF loan; far more importantly, though, it gains access to the world's private credit markets. The IMF then monitors the debtor nation's adherence to these conditions. If problems develop—as they have in recent years with distressing frequency—the IMF threatens to suspend loan repayments. The private sector follows suit, and negotiations recommence.

Why Do Politicians Accept Such Conditions?

The leaders of the debtor nations accept such conditions because, to date, they have found it in their interest to do so. Developing nations need access to the private credit markets of the world. The banks and other financial institutions of the developed world supply the capital necessary to finance development in the Third World. This fact is of course not new. The developing United States, in an era without the IMF, benefited by being able to borrow from the British capital markets. In today's world, however, the IMF controls access to the capital markets for most developing nations facing financial difficulties. Private lending institutions avoid lending to debtor nations lacking the IMF seal of approval.

This approval role means that most of the moneys made available as a result of IMF involvement are provided directly by private-sector lenders. Moreover the IMF leverages its resources by "encouraging" private lending institutions to grant loans. As a result only a fraction of the funds flowing to a debtor nation as a result of the IMF's involvement are channeled through the IMF. The major value of the IMF is thus providing access to the private capital markets—providing its seal of approval, not engaging in direct lending.

Why Do Banks Accept the IMF Decision?

Private lending institutions have to date accepted the IMF's seal of approval because they believe such approval makes it likely that further lending will prove profitable. The financial institutions might reach this conclusion because either they believe the IMF is insuring the loans, or they believe the IMF has credibly determined that the prospects for repayment of the loan justify further lending.

Only the second reason provides an acceptable role for the IMF. Nor do IMF proponents argue the first reason. Most economists recognize that an IMF loan-guarantee role would threaten the world financial system. Loan guarantees have long been recognized as risky public policy, in that they reduce the incentives to select and manage projects successfully. Nonetheless IMF critics, such as Congressman Henry B. Gonzalez (D–Tex.), have suggested that the IMF is playing exactly this role. Gonzalez, in a press conference organized by the coalition, noted that the IMF has become an "international FDIC for banks."[6]

An explicit or implicit IMF loan-guarantee role would endanger the stability of the international financial system. The function of the banking industry is to allocate funds to valuable purposes while taking into account the actual risks, costs, and benefits involved. If a financial institution believes that its own risks are reduced by the IMF, it is likely to commit resources to purposes that will fail to realize an adequate return. Resources will be diverted to subsidized risk areas and diverted from areas of higher social return. The waste inherent in such an imprudent loan policy is serious in our own domestic economy; thus loan-guarantee programs are receiving increasing scrutiny in Congress. Such imprudent loan policies, however, are far more serious in the Third World. The United States is a rich nation, where wasted resources imply "only" lower growth rates and reduced standards of living. The Third World is poor, and encouraging imprudent lending there means higher death rates, malnutrition, and destroyed dreams.

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[6] The analogy between the IMF and the FDIC is highly appropriate. Both illustrate cases in which political institutions have attempted to manage inherently risky situations by substituting centralized guidance for individual responsibility. In each case the central authority seeks to manage the risk by imposing regulatory restrictions, while simultaneously guaranteeing that no one will be held liable if the situation deteriorates. Such no-fault schemes socialize the risks of domestic and international lending and borrowing and thus create major "moral hazards." The thrust of this paper is that both the FDIC and the IMF act to destabilize their respective financial systems. See Vaubel (1983).

Thus the only defensible reason for the banks accepting the judgment of the IMF is their belief that the management program developed by the IMF is likely to increase the ability of a debtor nation to repay its debts. The critical role of the IMF, therefore, is to provide accurate credit assessment. Unfortunately this function is compromised by the IMF's lending role. To see this, it is useful to compare and contrast the credit-rating performance of the IMF with that of private credit-rating agencies, such as Standard & Poor's or Moody's.

IV. The Private Sector Analogy: How Standard & Poor's Manages

The credit-appraisal function of the IMF resembles the similar function played by such U.S. private-sector firms as Standard & Poor's (S&P) or Moody's (Smith 1983). These firms also provide credit-rating or seal-of-approval information on political entities, including cities, states, and even selected foreign nations. Private lending institutions use these ratings to determine interest charges and credit availability. Unlike the IMF, however, S&P is a private firm rather than a political entity, and it does not lend. As noted below, these factors arguably improve its effectiveness.

To see this, consider the problems that could arise if S&P were brought into the political system, say, as an arm of the Treasury Department. Political difficulties would be inevitable. Democratic administrations would be accused of favoritism by Republican mayors and vice versa. A nonpolitical, private-sector S&P avoids such problems for a very obvious reason. Like any private-sector firm, it must sell its product—in this case its credit ratings—to survive. S&P, unlike the IMF, must meet a market test. If S&P loses its reputation for objectivity, it will have nothing to sell. In contrast the IMF faces no such market discipline. The IMF professional management staff may well make objective recommendations, but that does not mean that these recommendations will survive the decisions of the board of governors. It is not surprising therefore that the IMF has been widely charged with political bias regarding its loan decisions to such nations as South Africa and Nicaragua. A nonpolitical IMF would be far more likely to provide objective information, rather than information tempered by the political agendas of its leading managers.

The IMF's lending role creates an equally obvious problem. Suppose S&P had to rate the bonds of New York City while at the same time it held a quantity of such bonds in its portfolio. S&P would have a strong incentive to avoid any downgrading that would reduce the value of its own holdings. Instead it would be tempted to work with city officials to arrive at what would be called a sound economic program for gradual recovery. Naturally city officials would take advantage of S&P's conflict of interest to argue against any severe readjustment. They could well argue that city salaries and public works spending must continue to increase for some period. S&P would thus be subject to the same type of political blackmail that the IMF undergoes. The credit-assessment role directly conflicts with the lending role.

This possibility was raised recently by Fred Bergsten, director of the International Institute of Economics and a strong supporter of the IMF (1983): "Traditionally the Fund has gone in and out, like a revolving fund, . . . over a period of one to three years. I don't think that's possible now. . . . It [the Fund] is kind of locked into the countries where it has put a lot of money. . . ." The political tightwire acts that have characterized the recent negotiations between the IMF and Brazil, Argentina, and Mexico indicate the extent of this conflict. On the one hand the IMF wishes to be objective, while on the other hand the IMF's own finances are heavily linked to the prospects for these nations. Indeed, if the IMF continues to renegotiate its agreements under pressure, banks will come to doubt the objectivity of any IMF seal of approval. In such cases banks may come to ignore the credit-assessment role of the IMF and respond only to its implicit loan-guarantee role. If that happens and banks come to believe that the IMF will protect their loans, no matter how imprudent, the percentage of bad loans granted will increase and this will further exacerbate the plight of debtor nations.[7]

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[7] The dangers outlined in this section have largely come to pass since this paper was first prepared. Argentina first balked at repaying its loans and the U.S. Treasury designed a jerry-built rescue scheme involving Mexico, Brazil, Venezuela, and the United States to "save the situation." Having learned that blackmail works, Argentina then elected not to meet a payment schedule. Under existing U.S. banking regulations, this action would have made Argentina loans nonperforming and thus would have required that they be removed from the asset sheet of the lending U.S. bank. In turn this would have led to a substantial change in the apparent profitability of such loans and thus a reduction in the stock value of the respective banks.

The U.S. Treasury, driven by desire to ensure against creating any problem for large banks, simply changed the deadlines for repaying such loans under the pretense that Argentina would soon reach agreement with the IMF over conditionality terms that would allow repayment again. Argentina responded as one might have imagined by

S&P Provides a Far More Sensitive Credit Appraisal Function

One area where the superiority of the S&P model is dramatic is in providing a much greater level of data than does the IMF. The IMF gets involved only when a nation is in dire straits, and then it provides only two ratings: the nation either is or is not eligible for private-sector lending. This makes it extremely difficult for the IMF to enforce its decrees. Minor infractions would scarcely seem to justify termination of payments and yet enough minor infractions would undermine the conditionality agreement. S&P in contrast, uses a 20-tier rating system with credit availability and interest rates varying accordingly.

This early-warning information role is not as exciting as *Perils of Pauline* rescue missions, but the case for preventive medicine would seem especially strong for Third World Nations. To continue the current IMF approach seems particularly unfair to the peoples of the Third World. The leaders of U.S. political entities having resources adequate for relatively large policy adjustments are notified at once of any threat to their credit rating. In contrast the IMF allows debtor nations to proceed merrily along and enters the scene only when the economies of these nations are near collapse and require major and rather costly adjustments. A private sector model would seem far more merciful.

S&P Leaves Politics to the Politicians

The private sector realizes that certain functions are best handled independently. Thus the S&P, unlike the IMF, does not attempt to assume the politicians' role. S&P does not dictate any recovery plan. S&P is well aware that mayors have available a wide range of professional consultants if they wish to obtain advice. Of course S&P is prepared to discuss the basis of its judgments and to revise its ratings if conditions change or if a city elects to change its policies, but it does not presume to set the priorities of the political jurisdiction. In contrast the IMF plays a far more activist role. Indeed the IMF claims to be the credit doctor that can make sick nations well. This meddling with the political affairs of sovereign nations is dangerous; most

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raising the stakes, and it is now (summer 1984) apparently succeeding in softening the IMF's initial conditionality terms.

Contrast this highly political, highly arbitrary process with the recent decision by S&P (15 June 1984) to place on notice the state of California that a proposed tax-reduction plan might reduce the state's credit rating. The difference between such automatic nonpolitical objective assessment of the S&P and the political capriciousness of the U.S. Treasury/IMF negotiation process is striking.

political entities are extremely jealous of their sovereign status. Moreover such meddling provides many opportunities for the patient to coopt the doctor.

How Effective is the IMF as a Credit Doctor?

The IMF as a doctor does not seem very successful. Roland Vaubel (1983) has noted in his article on "The Moral Hazard of IMF Lending" the danger that the IMF in standing ready to assist nations that get into difficulty increases the likelihood that such difficulties will occur. To reinforce this point, Vaubel (p. 65) cites Wilson Schmidt, the individual in line to head the World Bank at the time of his tragic death: "It can be argued that, absent the Fund, individual countries would presumably be less likely to get into balance of payments difficulties because they could not rely on the prospect of Fund resources when those difficulties arose."

Vaubel also noted some disturbing statistics, such as that the IMF has a low cure rate; indeed, if the IMF were viewed as a credit rehabilitation program, the repeated offense record of its clients would raise many questions. A minority of the membership of the IMF accounts for most of the recurring loan requirements, a pattern that would not be expected to occur if financial mishaps were random. The IMF appears to have created a class of permanent bad-credit nations that have grown accustomed to its emergency assistance.

A New Private Initiative

Market alternatives to the IMF should have received far more attention in the recent congressional debate. They did not in part because few legislators really understood the operations of the IMF and its alleged rationale, while those people in the administration knowledgeable about the IMF and its problems had become committed to the IMF increase. Those within the administration who favor reforming the IMF, at least in the longer run, are likely to find it far more difficult to gain an audience for reform in the absence of any crisis.

Perhaps this view is too pessimistic. The world's financial managers have long recognized the lack of information on the loan status of nation states not yet in dire straits. Efforts to have the IMF move into this area have proved unavailing. Thus the banking community recently created the Institute of International Finance, Inc. (IIF). Its interim chairman, William S. Ogden (1983), has outlined three tasks: (1) to gather and make available economic information on debtor nations, (2) to monitor the credit status of such nations and offer economic advice selectively, and (3) to recommend measures to improve international lending. These tasks suggest that the IIF may well resemble the S&P model discussed above. Ogden emphasizes that the initiative was taken by the private sector in response to the needs of the industry. A private S&P may therefore exist regardless of the eventual fate of the IMF.[8]

V. The Political Framing of the Issue

Private credit-assessment alternatives received little attention in the actual political debate. Instead the supporters of the IMF successfully framed the debate in terms of an emergency response to the international debt crisis. This framing of the IMF quota increase encouraged fence sitters to vote for passage. The key argument, and the one that proved most effective, was that failure to enact the IMF quota increase threatened the safety and soundness of the world financial system. Although IMF opponents, including Milton Friedman and Robert Weintraub, succeeded in raising many questions regarding the overall wisdom of the IMF, they were unable to overcome the view of many regulators that the costs were low and the risks, even if very low, justified the price tag. After all $8.4 billion is not a major commitment in the Washington scale of things, and no one wanted to be responsible for *Götterdämmerung*. Daily stories about the international "debt bomb" carried the day.

Moreover the proponents successfully used the humanitarian theme that has long legitimized foreign aid. Although always careful to note that IMF assistance was not "aid," they nonetheless argued that the increase was essential to prevent further suffering in the Third World. The *Washington Post*, in an especially moving editorial (1983b), noted that Brazil's difficulties stemmed from a desire to "lower infant mortality rates" and went on to note that one should vote against the IMF increase only "if infant mortality rates don't concern you. . . ." Statements such as these made it extremely easy for the traditional supporters of humanitarian assistance to see the IMF question as simply one of help to the needy and thus deserving of support.

A final argument of major political effectiveness if not quite of the same high moral order was the claim that IMF assistance created wealth in the United States. The "jobs-and-money" rationale for government spending is of course used to defend every government program; nonetheless it has an obvious political appeal. Government income-transfer programs do redistribute wealth, and the recipients are often willing to support legislators who favor such transfers. The IMF transfers to foreign governments do allow some U.S. interest groups involved in trade with those countries to benefit. Thus large numbers of firms outside the banking industry did support the IMF increase. An advertisement entitled, "Pass the IMF Bill," that appeared in the *Washington Post* (1983c) in the closing days of the debate was signed by a list that read like a who's who of big business in America.

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[8] There remains considerable uncertainty about the exact role that this new group will play. Ogden (1983) seems to suggest an active role in providing information; however André de Lattre, the first head of the IIF, stated (in Baird 1983) that the IIF "will not be a negotiating body between the banks and the borrowing countries and it will not be a rating agency." This ambiguity will be resolved only as the IIF defines its functions over the next several years.

Many of the arguments advanced in defense of the IMF, however, did not necessarily support an IMF funding increase but rather supported the continuation and improvement of the IMF's credit-assessment and credit-advisor role. Let us consider these points.

The IMF: Essential to World Financial Soundness and Safety

The most effective single strategy employed by IMF proponents was what may be called the fear theme: Vote for the IMF or the financial world will collapse. Newspapers were filled with talk of the international debt crisis and editorialists predicted "debtor OPECs" and similar default scenarios. One of the more extreme statements was that by James D. Robinson III, chairman of American Express (in Brimelow 1983). In a reference to those who might oppose the IMF funding, Robinson said:

> I'd like to know how many able-bodied men between the ages of 18 and 24 they have in their community and what size boots they wear. I'd tell them to get ready to go to Latin America, because you let some of those governments go populist and you're going to have national security problems.

In a similar vein, the managing director of the IMF, Jacques de Larosière, noted (1983) that failure to approve swiftly the IMF increase would "cripple this institution . . . [with] incalculable consequences for economic and financial stability worldwide."

Several attempts were made to introduce a note of rationality into this debate. Perhaps the most notable attempt was that made by the late Robert Weintraub, senior economist for the Joint Economic Committee. His monograph *International Debt: Crisis and Challenge* (1983a) provided IMF opponents with a valuable tool for educating legislative staff. Weintraub argued that the fears associated with the debt crisis had been vastly overblown, that painful adjustments were inevitable but should be borne by those directly involved and not the American taxpayer, and that the best solution would be to avoid any permanent increase in the IMF's resources. Banks might well reschedule loans, but that decision should be left to the market. Weintraub did see a temporary lending role for government bodies, but no permanent increase seemed necessary.

Weintraub's monograph had some impact, but the issue was sufficiently complex and the timing rushed enough so the message was not heard effectively by most legislators. Weintraub unfortunately became ill during the summer and later died, thereby removing a major spokesman for logical reform from the scene. His second monograph, *International Lending By U.S. Banks: Practices, Problems, and Policies* (Weintraub 1983b), was published just before his death and provides a useful basis for future reform efforts.

Other critics also argued persuasively that a financial crisis would not occur in the absence of increased IMF funding. Roland Vaubel (1983, pp. 73–74) made the point early in the policy debate and it was often repeated by the Citizens' Coalition Against the IMF Increase. The coalition addressed a number of specific arguments used by proponents of the IMF funding increase and demonstrated that these arguments were mostly fallacious. The first set of arguments addressed by the coalition dealt with the following four points.

1. *IMF Lending Is the Only Way to Address Liquidity Problems.* This argument is not convincing. After all, private lenders and their debtors already have every incentive to avoid default. Banks have no reason to reduce the economic value of their foreign loans any further than necessary. Debtors have every reason to avoid being cut off from world financial markets, in that their future financial prospects require foreign capital. What does the IMF add to this situation? Arguably the IMF merely makes it easier for both sides—and Third World political leaders—to delay the difficult adjustments that bad management or unfortunate circumstances occasionally make necessary. Easy credit creates a moral hazard, as discussed earlier. Any effort to protect nations from the consequences of adverse balance-of-payment adjustments increases the likelihood that such problems will occur. Empirical evidence that this possibility is actually occurring is provided in Vaubel (1983).

2. *IMF Lending Stabilizes a Floating Exchange World.* As Milton Friedman said, there is no obvious role for the IMF in a world with floating exchange rates. If each nation was to allow its currency to fluctuate freely against other currencies, then each nation would have a strong incentive to adjust its behavior in the proper direction. In such a world there would be no foreign exchange crises. External factors such as oil price increases and internal events such as droughts

or monsoons, as well as policy errors, would affect exchange rates automatically—a nation would experience feedback signals at once that would encourage it to make the necessary corrections. In this world there would seem to be no need for the IMF lending role.

IMF proponents, however, suggest that the IMF should play a more critical role in stabilizing exchange rates. In principle such stabilization efforts, if they were successful, would be extremely valuable. Prices that fluctuate unnecessarily are of course costly. Firms and financial institutions have great incentives to take whatever steps they can to reduce these fluctuations. There are a number of alternative approaches, though, to a world central bank: private borrowing to moderate exchange rate fluctuations, adjustable equity participation rates depending upon exchange rates, or entering the futures markets in some convertible currency to hedge against fluctuations in exchange rates. The ready availability of IMF lending discourages these self-help alternatives.

3. *IMF Lending Sweetens the Conditionality Agreement.* Proponents argue that the IMF must lend to provide the incentives for foreign nations to agree to the conditions. This argument ignores the fact that most of the leverage possessed by the IMF arises from its gatekeeper role with respect to private lending. It is the leverage, not the direct lending, that persuades nations to listen to the IMF. Moreover an IMF conditionality agreement either is or is not justified in its own right; the use of an upfront sweetener is all too likely to encourage politicians to delay painful adjustments. One is reminded of the sinner in a small boat in a storm, praying to God that if he was saved he would give up his wicked ways. But when out of nowhere a ship appears, he calls out, "Wait a minute, I think I'll be O.K." Third World politicians, like most politicians, would prefer to delay pain. IMF lending makes that possible.

There is also something distasteful about the propriety of sweetener loans, as though Third World leaders would not do what was best for their nations without side payments. Providing what might readily be seen as a bribe may cause many more problems over time. Finally sugarcoating says a lot about the attitude of IMF officials toward Third World leaders—that the leaders are kids who do not know what is good for them and thus need the "grandmotherly" guidance of the IMF staff. Politicians of course are far more likely to gain advantage from that situation than are the IMF staff. The IMF is already attacked in the world financial community as being too paternalistic, and thus feels the need to avoid being too prescriptive.

4. *IMF Lending Reduces Political Instability.* Equally unconvincing is the argument that without increased IMF funding to allow

banks to continue current lending practices, Mexico and other large debtor nations are likely to collapse. This argument is disingenuous. It is the IMF austerity conditions that have proven so controversial and politically destablizing, not the more gradual and flexible arrangements that develop naturally between banks and their debtor. Arguably the current IMF policies actually encourage political instability. Certainly IMF policies encourage greater and greater levels of international debt, and the quantity of international lending seems far more important to the IMF than the quality of that lending.

Indeed the current crisis results in part from the availability of IMF financing. External shocks or internal mismanagement create a need for painful adjustments, which, however, can be deferred because of the availability of IMF financing. Delay merely increases the magnitude of the eventual adjustment and increases its pain. Eventually these costs will be experienced. As the IMF encourages central resolution of these questions, the pain will almost certainly fall disproportionately on the politically less powerful. The virtue of having the poor bear the brunt of economic adjustments seems unclear.

Moreover, as noted earlier, the S&P model would suggest that nations be put on the alert much earlier that their policies or external events are leading them into difficulties. The IMF practice of simply classifying a nation as being in one of two classes—worthy of credit or not worthy of credit—is far more crude than we would expect if the function were privately managed. Moreover the austerity conditions themselves, while perhaps economically sound, are clearly externally designed and mandated, a situation that creates major political problems. Those problems are likely to be greater than had the adjustments been designed and administered internally.

Indeed the value of conditionality agreements is subject to major challenge on still another grounds. In effect the logic of a conditionality agreement is that some means can be found to improve the efficiency of any nation state regardless of its institutional arrangements regarding property and profits. That belief is well-founded in the so-called scientific socialism literature, but it has been effectively criticized in the work of F. A. Hayek (1978) among others. As noted earlier the details of a recovery plan are far less important than the existence of an incentive structure that encourages wealth-producing activities. Conditionality plans ignore institutional arrangements and instead establish goals for the nation as a whole to meet. But why should institutions that are reluctant to modify their behavior even when faced by crisis conditions be more ready to do so after the IMF has reduced the level of the crisis?

In conclusion the argument that the financial system of the world would be endangered without increased IMF funding was not particularly convincing. The coalition was able to muster considerable expert opinion that a collapse was an extremely unlikely option and would be made far more likely by the continued machinations of the IMF. Nonetheless the lingering uncertainty in the minds of many legislators made the "collapse" argument particularly effective, and the conventional remedy was to spend more money.

Humanitarian Arguments for the IMF Increase

Foreign aid has long enjoyed support for its humanitarian objectives. Although IMF proponents are quick to note that the IMF assistance is not aid but rather loans that are repaid, they believe nonetheless that without the IMF the plight of the Third World would be far worse. According to Michael K. O'Leary in his book *The Politics of American Foreign Aid* (1967), Americans support foreign aid to the extent such aid (1) is seen as exporting the "American way of life," (2) can be viewed as basic humanitarian relief, (3) supports allies, and (4) entails a relatively low level of involvement. Americans oppose foreign aid to the extent that the aid supports unfriendly ideologies, nonallies, and wasteful, nonpeople-related projects, and requires a deep involvement abroad.

Both IMF proponents and opponents succeeded in different ways in emphasizing these contradictory themes in the 1983 debate. As noted earlier, the *Washington Post* continuously linked the IMF decision to the plight of the Third World and characterized IMF opponents as callous and indifferent to humanitarian concerns. In contrast, opponents of the IMF increase emphasized past loans of the IMF to communist nations or South Africa, depending upon the audience being addressed.

The criticisms of foreign aid as impoverishing rather than aiding the poor have yet to have any significant impact on traditional supporters of foreign aid. P. T. Bauer's suggestion (1981b) that the term "aid" "disarms criticisms, obscures realities, and prejudices results" remains true. Foreign aid continues to be judged on its intent rather than its performance. The IMF debate provided an initial effort to educate interest groups on the problems associated with such aid programs, and this effort will continue. Proponents offered a number of supporting arguments that stemmed from this foreign assistance theme. These arguments are discussed below.

1. *Private Capital Markets Won't Lend Enough.* This argument is suspect. As noted the IMF is not meant to be a foreign aid agency. It is intended to provide only short-term assistance to nations suffer-

ing reversible liquidity problems. As such the only lending it should do is that which makes economic sense. If the IMF's assessment of a nation as credit-worthy is objective, why should not all the lending be through private banks? As noted, most of such lending already proceeds in this way. Those critics who reject the market solution seem to do so only because they do not like the answer it gives. They believe that political institutions will lend more, so they favor that approach. Their preference for the IMF encourages risks that would not be sustained in the market and needlessly increase the vulnerability of the U.S. financial system.

2. *IMF Lending Creates Job Opportunities for Americans.* Rationalizing dubious public policies on the grounds that they create jobs has replaced patriotism as the last refuge of a scoundrel. The IMF program, like any program that transfers wealth, will increase employment in some industries at the expense of others. If IMF aid is effective at maintaining U.S. exports, then employment will expand in these industries at the expense of reduced employment in industries that gave up the capital used to finance the IMF expansion. Moreover, even in the area of job transfers, the IMF program does not acquit itself very well:

- Foreign trade is important to the United States, but the amount of foreign trade at risk even in the worse-case analysis (an extremely unlikely scenario) would affect only a fraction of such trade. According to a statement by Senator Gordon Humphrey (1983), total curtailments of all imports by the leading Latin debtor nations—Brazil, Argentina, Chile, Mexico, and Venezuela—would reduce the U.S. gross national product by less than 1 percent. Not only is that outcome extremely unlikely, but moreover, as noted below, curtailed foreign markets for U.S. products is made likely by IMF policies.
- As William Simon (1983) has noted, sending more money abroad to create jobs is akin to a shopkeeper throwing money out of his store window in the hope that some passerby will find the money, pick it up, and buy something. There are far more effective domestic options that would yield a greater return—education, public works, investment loans, and so forth. Also domestic subsidies are far more likely to be spent in the United States.
- The IMF, like any lending institution, is concerned more with ensuring that the debtor's cash flow allows him to repay the loan than with any long-term growth objective. This amounts to a strategy of buy less, maintain less, invest less, and sell more. Such policies are good for the lending institutions but

may not be good for the nations, and they certainly result in an immediate reduction in markets for U.S. goods and greater competition for U.S. exports in the world market. In effect if not in principle, the IMF's policies encourage protection. This is destructive in itself; moreover the policy cannot be sustained worldwide. It is impossible for all nations simultaneously to curtail imports and expand exports (Meltzer 1983b, pp. 7–8).

- The only way to attain sustainable growth in world trade and thus sustainable increases in U.S. trade-related employment is to encourage prudent loans that create real wealth growth in the Third World. Such growth is indeed important for increased trade and expanded U.S. exports. IMF practices, however, make such productive lending less—not more—likely by rewarding those who promoted past bad loans.
- Public policy analysts know well how often the jobs argument is used to justify various government pork-barrel projects. Its use in the IMF funding case is indicative of the weakness of any case for increasing IMF funding.

3. *IMF Lending Is Free.* The claim that IMF funding is free is again unsupportable. There is no free credit available in our economy. Our current budget accounting rules do allow the costs of IMF funding to be hidden off-budget, but that is a policy questionable in its own right and one that has been permitted only in the last 15 years. Regardless of the budget treatment, though, increased funding of the IMF diverts funds from the U.S. capital markets. The resulting lower capital availability translates directly into higher interest rates and creates problems for small businesses, farmers, and consumers.

4. *The IMF Provides a Convenient Scapegoat for Necessary Reforms.* The argument is that the IMF provides the politician with an external devil to blame while he undertakes the necessary reforms. This argument raises many questions; for instance do we really wish to encourage Third World nations to believe any more than they now do in the exploitation thesis, whereby their poverty is caused by our wealth? At a recent conference Sir Alan Walters (1983, p. 70) noted that many see the IMF as "a convenient scapegoat," but one largely controlled by the United States. Resentment against the IMF becomes resentment against the United States. In any event the scapegoat role does not require that the IMF lend. Banks and Third World countries can lambast the IMF in its seal-of-approval role without having the IMF lend anything.

5. *The United States Must Increase Its Quota Contribution for Leadership Reasons.* The United States would not lose prestige by

moving to challenge the IMF's lending role. Foreign nations are unlikely to extend credits to the IMF if the United States elects to drop its commitment.

6. *The IMF's Information-Gathering Role Is Essential.* Whether the IMF is more likely to provide quality data than a private-sector firm is questionable. The IMF's information-gathering role can readily be separated from its lending role. Indeed the emergence of The Institute of International Finance suggests that the IMF has failed to provide all the required information in a timely manner.

7. *Only the IMF Can Enforce Conditionality Agreements.* This proposition, as discussed above, is dubious. Even if one accepts it for argument purposes, it does not justify the IMF lending role. As noted the leverage of the IMF results primarily from its ability to attract or deter private investment. That leverage is strengthened, not weakened, by reducing its lending function.

Specific Arguments Against the IMF Increase

In addition to refuting the arguments favoring the IMF funding increase, the coalition raised the following three arguments against the increase.

1. *Trade Objections to the IMF Increase.* One issue raised by Senator Humphrey (1983) deals with the advisability of providing U.S. assistance to foreign nations to finance industries in competition with our own domestic industries. This issue is an important one and bears on the overall question of the undue reliance on "official" or "government-to-government" foreign aid. Many of the developing nations have learned some bad economics, and the result has been wasteful investment in infrastructure, atomic power, steel mills, and national airlines. The attitude of the Third World seems to have been that since the United States and other advanced nations are wealthy and have such investments, all the developing countries have to do to get wealthy is to build such facilities. In many ways the Third World and its financial advisors seems to believe in a modern version of the cargo cult.

Of course we are not responsible for the stupidities of other nations, but we are well advised to minimize our encouragement of such practices. We cannot do so, though, if we encourage these actions by providing the IMF with the wherewithal to bail out any nation and its bank creditors when poorly thought through investments go sour. The Brazilians in particular have put together a history of wasteful investments that make our own bureaucracies look efficient. Now they are in trouble and the IMF is required to provide the funding to ensure that they keep going and that their banking creditors do not suffer losses. Is this logical? After all the Brazilians built steel mills that made little economic sense and then attempted to subsidize the output and provide export subsidies besides—all in an attempt to avoid the painful admission that they should never have embarked on this course in the first place.

Absent the IMF as lender of last resort, national leaders would still make foolish or unfortunate decisions, in that people are not equally competent and risk is a fact of life. Bad decisions would be less likely, however, because those involved in the decision-making process would face the full consequences of their actions. Subsidized steel or copper smelters would still arise, but far less often and without our active financial assistance.[9]

2. *The "Bail-In" Argument.* IMF proponents have argued that the IMF is not "bailing out" the banks, but rather "encouraging"—some would say coercing—them to lend more and thus increase their exposure in risky nations. This "bail-in" policy is scarcely favorable to the banks, and thus the IMF bill cannot be considered a subsidy to the banking industry. This line of argument raises a number of questions. Do we wish to encourage banks to go further than prudent lending policy would dictate in lending to nations already suffering from high interest burdens? Are we not thereby encouraging banks to take short-term profits at great risk? These risks are serious; the depositors of the banks involved in the foreign debt situations are all guaranteed by the FDIC. Thus if these banks fail, the U.S. taxpayer will be held responsible for any unfunded liability.

Of course IMF proponents believe that the risk of default is small and that if the loans are extended, the world will recover. But should we trust their judgments over those that would prevail if bankers had to make these choices directly? Banks after all are in the business of making risky investment decisions, whereas the IMF is not. Most of us find it easier to gamble with other people's money, but we rarely act as responsibly in such cases.

Moreover, although banks are indeed encouraged to place more of their funds at risk than they believe advisable, they have still been allowed large upfront rescheduling fees and permitted to treat all existing loans as if they were still worth their book value. That fiction is worth considerable amounts in that the banks would otherwise have to begin setting aside loss reserves.

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[9] An interesting impact of the IMF on world trade was recently noted by Hugh M. Morgan, president of Western Mining Corporation of Australia. Morgan (1984) noted that the IMF's emphasis on restoring cash flow at any cost makes it sympathetic to subsidized production schemes that garner foreign exchange. Thus nations such as Zambia and Chile export highly subsidized copper at rates that displace efficient but unsubsidized Australian and U.S. production. The resulting collapse of foreign markets for the efficient producers places pressure on these nations to erect trade barriers. Thus the IMF acts to promote protectionism in the developed world as well as in the underdeveloped world. Moreover the world finds itself poorer because copper is being produced less efficiently than otherwise would be the case.

3. *Big Bank Favoritism.* The IMF quota increase creates a major inequity in that foreign lending is treated differently from domestic lending. The experience of, say, the Penn Square bank compared with those banks now at risk in Mexico is a good example. In retrospect both situations reveal overinvestment in oil-related properties in anticipation of continued oil price increases. When the increases failed to happen, some of these loans became nonperforming. Penn Square was subject to normal accounting practices and went into reorganization. Some shareholders lost large amounts, as did some depositors. A painful experience, but our economy is a profit-and-loss economy and without the loss there is no likelihood of rational investment. The large money center banks that are suffering similar experiences with their Mexican debtors to date have been able to avoid similar consequences. In part this may indicate that the loans granted by these institutions were more successful, but the situation also reflects the fact that continued IMF and other U.S. lending to Mexico has allowed the Mexican creditors to continue to make their interest payments. If big institutions are not allowed to experience the same market disciplines as small banks, there is little equity in the system.

The argument that big banks cannot be allowed to fail, which has been offered by some IMF proponents in defense of this inequity, is contradicted by Weintraub's (1983a) analysis. He demonstrates that the required write-offs could take place over time and that this might well lead to shifts in banking personnel and some deposit shifts, but that none of this need lead to any major disruption in the U.S. banking system (pp. 25–34). Moreover, to the extent that one believes that big banks are too important to experience normal business losses, one should oppose further increases in their exposure—not endorse the IMF policies.[10]

VI. The Political Opposition to the IMF

In accessing any lobbying campaign, it is important to realize that cause and effect are intricately interwoven. That fact creates considerable problems for those seeking to rationalize the story. A campaign is somewhat akin to a market in that the results emerge from a process far beyond the grasp of any one individual. Analysis, interest-group positions, media support or opposition, and the degree and nature of the lobbying campaign all have important impacts on the eventual outcome. Moreover such factors as personalities, logrolling arrangements, and side issues may all have more to do with the issue than the specific merits of the case. This section discusses briefly four elements of the effort of the Citizens' Coalition Against the IMF Increase to reframe the IMF debate: the effort to develop analytic material on the issue, the effort to develop and motivate coalition opposition to the measure, efforts to gain sympathetic media coverage, and finally the lobbying effort.

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[10] The FDIC now appears to have adopted the Treasury/IMF line that no large banks can ever fail no matter how mistaken their policies may have been. The politics of avoiding any adjustment costs in the hopes that things will improve are now dominant in both the national and international spheres. The destabilizing impact these decisions are having on financial operations is obvious.

Analytic Background for the IMF Debate

Over the last two decades market-oriented groups have challenged the dominance of those organizations favoring government solutions. Many of these pro-market groups played some role in the IMF debate. Among the many activities and publishing events attributable to them were a joint conference by the Heritage Society and the Philadelphia Society that resulted in publication of *International Lending and the IMF* (Meltzer 1983a); a *Citizen's Guide to the World Banking Crisis* (1983) by the Conservative Caucus Research, Analysis & Education Foundation; a Cato Institute Policy Analysis on "The Causes and Risks of Excessive Foreign Lending," by Mark Hulbert (1983); the proceedings of a Taxpayers' Foundation seminar, *Constructive Approaches to the Foreign Debt Dilemma* (Hulbert and Meltzer 1983); and a public policy forum, "The Third World Debt Crisis and the IMF," organized on 7 November 1983 by a number of groups, including liberal opponents of the IMF. These educational activities were accompanied by numerous articles criticizing the IMF in various journals.

These specific IMF-targeted programs reflected to some extent earlier work by critics of foreign aid, in particular the work of P. T. Bauer. His work on the value of "official," or government-to-government, aid policies (see, for example, Bauer 1972, 1981a), and the work of Melvyn Krauss (1983), provide a convincing argument for curtailing on humanitarian grounds most existing aid programs.

The IMF debate also attracted the comments of numerous intellectuals. Nobel Prize winner Milton Friedman spoke out vigorously against the increase, as did Robert Weintraub. Manuel F. Ayau, a Guatemalan economist, noted that the ready availability of IMF financing encouraged his nation to delay necessary currency adjustments. Ayau (1983) suggested that those wishing to help the people of Guatemala should lobby for opening the United States to Guatemalan imports rather than increased IMF funding. Allan H. Meltzer, noted (1983b) that IMF policies promote protectionism by requiring all nations to expand exports and decrease imports. Sir Alan Walters, former economic advisor to British Prime Minister Margaret Thatcher, suggested (1983) that the IMF may be more the cause of the world's economic problems than the solution. The strongest element of the coalition's efforts was attracting and disseminating the arguments developed by these and other scholars.

Coalition Support and Opposition

Many public interest groups were involved in the IMF debate and most of them opposed the increase. Prominent taxpayer, promarket, and conservative groups took the lead in organizing opposition. These groups also made a vigorous effort to link up with liberal, church, consumer, and other groups. The eventual Citizens' Coalition Against the IMF Increase brought together promarket groups such as the Council for a Competitive Economy[11]; conservative organizations such as the Conservative Caucus, Free the Eagle, and Coalitions for America; taxpayer organizations such as the National Taxpayers Union, the National Tax Limitation Committee, and the National Taxpayers Legal Fund; consumer representatives, including Ralph Nader and Congress Watch; environmental groups such as the Environmental Policy Center; and activist religious groups such as the United Methodist's Board of Church and Society. These disparate groups had to a limited degree worked together in the defeat of the Clinch River Breeder Reactor, and this experience helped to make possible another cooperative effort.

The environmentalists' interest in curbing funding for multilateral lending institutions reflects a growing concern that such aid constitutes nothing more than an effort to export the U.S. Army Corps of Engineers philosophy to the Third World. Environmentalists have long noted the effectiveness of economic arguments in arguing against economically wasteful and environmentally disastrous public works projects. They have come to accept the premise that good economic policy generally promotes good environmental policy. Because environmental groups have limited resources and the strength of the environmental movement in the Third World is low, environmentalists have come to see curtailed public works spending in the Third World as essential to their objectives. Environmentalists organized the first systematic review of the problems in a recent hearing, "Environmental Impact of Multilateral Development Bank Funded Projects," held on June 28–29, 1983, before the House Banking Committee. Future IMF debates are likely to see increasing opposition from environmentalists.

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[11] As director of government affairs, the author led the Council's efforts in the IMF area.

The IMF situation has many similarities with the Clinch River experience. The IMF encourages a pattern of centralized, large-scale government spending in the Third World, in that the IMF lends to governments not individuals. Moreover the same pattern of major corporate support emerged in the IMF debate. Political systems tend to respond to power and often power correlates with special interests. So it is not surprising that the administration, the Chamber of Commerce, and the National Association of Manufacturers, among other special-interest groups, supported both the IMF and Clinch River. Special interests recognize the benefits of politically allocated resources and invest their political resources in protecting these privileges. Government is largely manned by groups who have long worked with these special interests and they act as allies whenever any effort is made to reduce their power. The success of the Taxpayer Coalition Against Clinch River suggests that these forces can be overcome, given enough time and energy.

Supporters of the IMF quota increase, however, included groups other than those business interests having a direct financial stake in the IMF. Agribusiness, for example, joined the financial community in supporting the measure. Proponents also numbered public-interest groups among their ranks. These included the League of Women Voters and the Consumers for World Trade, along with such academic groups as the Institute for International Economics. The support of the league is longstanding and stems largely from its belief that the IMF is a vital element in promoting international trade and development. This belief was repeated in a letter to U.S. senators from league president Dorothy S. Ridings (1983):

> The IMF plays a vital role in promoting worldwide financial stability and contributes to economic progress in the developing world. . . . The [IMF] funding would help support the development of country projects vital to increasing the living standards of millions of people.

The IMF also continues to enjoy the support of a number of free trade, humanitarian organizations. These groups are likely to oppose the IMF as they become more familiar with the findings of free-market analysts that contrast the rhetoric of the IMF with its reality. Nonetheless it is clear that a major educational task remains in this area.

Media Treatment of the IMF Issue

The most disastrous area for those opposing the IMF increase was that of media relations. The coalition found it extremely difficult to arrange for a full discussion of the intellectual and moral case against the quota increase. To most of the press, the IMF debate involved a group of enthusiastic but ignorant populists on the left and right opposing the reasoned views of all right-thinking people. For example, the *Washington Post* (1983a) editorialized that opposition to the IMF reflected "ignorance, misdirected zeal and isolationism. . . ." That viewpoint was repeated in editorials in almost every major newspaper in the nation. The substantive points raised by the IMF opponents received very little attention; rather the coverage given focused on the opposition coalition and the tactics employed.

The coalition's inability to obtain an adequate public debate on the pros and cons of the IMF was unfortunate. As most legislators had only a tenuous understanding of the issues involved, the overwhelming editorial support given to the IMF increase had a major impact. Legislators, like most people, know only what they read in the papers, and thus decided that the IMF increase must be good public policy.

Lobbying on the IMF Question

Initially the IMF question was not a familiar one to most of the groups involved in the coalition. Nor was the issue one on which large amounts of explanatory materials existed. The coalition was forced to develop educational materials and find ways of talking about the issue. Moreover coalition members had some difficulty in meeting directly with legislators, for in many cases the IMF question seemed far afield from the legislators' normal agenda.

Many of the liberal opponents also adopted a reformist position with respect to the issue. This made combined lobbying difficult, because few groups agreed on what if any steps would make the IMF increase acceptable. Some favored greater regulatory supervision over those banks involved in international lending, whereas others favored language requiring the U.S. representative to the IMF to promote human rights or environmental values. None of these provisions were well developed, and most would not attract the support of other members of the coalition. Efforts to develop a uniform position were unavailing, given the time pressures. The members of the coalition generally opposed the increase, but many of the groups were willing to sign off on an increase if certain conditions were met. The lack of strong agreement was inevitable in such a broad-based coalition in its initial stages; nonetheless it did complicate the lobbying task.

In contrast the supporters of the increase were well prepared to present an impressive case. After all they were defending a position that was favorably treated in the press, seemed consistent with many of the better values of this nation, represented conventional wisdom, and had the backing of many powerful groups. Also the administration used its not inconsiderable influence to obtain one-on-one meetings with almost all House and Senate legislators having any doubts about the measure. Secretary Regan, for example, was quoted in the *Financial Times* (1983) as saying, "I lobbied 400 out of 435 congressmen before that vote." If the secretary's account is accurate, he spent an enormous amount of his time on this issue, indicating the level of support accorded this measure by the administration.

In sum the coalition's effort was relatively successful. A number of important tasks were achieved that will provide an advanced base for future opposition work in this area. A number of public interest groups are conversant with the nuances of the IMF debate, the problems with presenting the issue are well understood, and an impressive base of intellectual material exists. The media are likely to reassess the issue given additional time, and there will be time.

VII. Conclusion

The IMF debate was the first major challenge to the conventional wisdom that government institutions have a primary role in managing the world economy. That premise has for some time now come under attack in such domestic economic policy areas as energy and transportation, and it is long overdue in the foreign-assistance area. The coalition forged during the last year is likely to oppose such other forms of foreign aid as the Export-Import Bank. Moreover the private sector itself seems to be rethinking its reliance on the IMF. The emergence of private-sector firms prepared to supply credit information on debtor nations is encouraging and suggests that the arguments developed in this paper are better understood than indicated in the public statements of the IMF proponents.

The IMF increase should have been defeated, but its victory was extremely narrow and no one believes a future increase will have easier going. The battle has already had some positive impact in tightening the resolve of those within the administration who oppose the government-knows-best philosophy in the foreign arena. The latest World Bank "replenishment" is likely to be funded at a level somewhat lower than desired by its proponents. The IMF fight has given an opportunity for market-oriented individuals in the administration to fight a more successful fight in other areas. For example, Beryl W. Sprinkel of the Treasury Department recently questioned (1983) why the United States should help nations that have done little to help themselves. He asked: "Do they [the nations receiving World Bank transfers] have an economic system that encourages savings, encourages investment, encourages work, that encourages adjustments, or do they have a rigid system?" Such statements suggest that the opposition to the IMF increase has already yielded some benefits. In sum the game seems to have been worth the candle—and there will be other rounds.

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"THE POLITICS OF IMF LENDING": A COMMENT

Robert Solomon

I shall discuss Mr. Smith's paper[1] under three headings: (1) the purposes and functions of the International Monetary Fund (IMF); (2) the nature of the international lending process; and (3) the performance of the major developing-country debtors. In the course of my comments I shall appraise the main proposition of the paper—that the IMF should be an international credit-rating agency but not a lender, and therefore it does not need financial resources in the form of increased quotas (or presumably any other form).

The Purposes and Functions of the IMF

Mr. Smith's paper characterizes the main purpose of the Fund as follows: "the IMF was to manage a world system of fixed exchange rates" (p. 212). The fact is that the Fund was created to prevent a repetition of what happened in the international monetary sphere during the 1930s, when countries used quantitative import restrictions, bilateral trade agreements, and competitive depreciation in efforts to achieve or increase trade surpluses as a way of overcoming deep depression. These policies came to be known as beggar-thy-neighbor practices. They were a negative sum game. All countries were made worse off by them.

Those who created the Fund had in mind several purposes. Perhaps the principal one was to promote the growth of unrestricted multilateral trade. To this end, the Articles of Agreement of the Fund call for currency convertibility and the avoidance of exchange restrictions so that the proceeds of a country's exports could be spent

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[1] "The Politics of IMF Lending." *Cato Journal* 4 (Spring/Summer 1984): 211–41.

anywhere in the world. The Articles did not call for "fixed" exchange rates, but they did state that exchange-rate parities were to be altered only if there were a fundamental disequilibrium and only with the permission of the Fund. The purpose here was to prevent competitive depreciations. Another purpose was to provide a pool of funds from which countries could borrow so that, if they were under balance-of-payments strain, they would not adopt measures "destructive of national or international prosperity," as in the 1930s.

The Fund thus had, at its inception, two major functions: to preside over a code of international economic and monetary conduct by its members and to be a source of temporary finance for countries that found themselves in balance-of-payments deficit either because of their own policy mistakes or because of external economic events over which they had no control. A third function has emerged in recent years. The Fund is becoming a forum for consultations about, and perhaps coordination of, macroeconomic policies among its members, particularly the larger industrial countries.

It should be noted that there is no substantive basis for the claim that IMF loans encourage centralized government spending. What the IMF lends is foreign exchange. The proceeds of IMF loans go to the central banks of the borrowing countries. The central banks are thus able to make foreign exchange available to importers, which could be primarily private firms and individuals or governmental entities, depending on the economic organization of the country. But there is nothing in the IMF lending process that pushes the borrowing country to more government involvement in the economy.

To say, as Mr. Smith and Milton Friedman do, that the original purpose of the Fund was eliminated when the world went to floating exchange rates is, in my view, simply wrong. It ignores a large body of economic literature about the determination of exchange rates and the phenomenon of "overshooting." The United States itself found it useful to borrow from the Fund in 1978 as part of its effort to stop the depreciation of the dollar.

More broadly, it is clear that, underlying the conception of the Fund, is the belief that not all problems are amenable to solution by market forces. Just as most nations, at the end of World War II, adopted measures that gave the central government—the fiscal and monetary authorities—responsibility to maintain high levels of employment in the belief that this would not happen automatically, in the international field the need for collective action was recognized by the establishment of the Fund. Such action need not be hostile to market forces. It simply supplements these forces.

The International Lending Process

Against this background, I now turn to Mr. Smith's proposal that the IMF confine its activities to rating the credit-worthiness of nations. He seems to believe that all nations have access to bank credit and that once the Fund gives its seal of approval to any of its member countries, banks would readily come forward to lend to them. The fact is that most member countries of the Fund are not in a position to borrow from banks. Three-fourths of total bank credit to all non-oil developing countries has gone to seven nations. The great majority of developing countries do not receive loans from banks even when they are operating under the Fund's seal of approval. These are the poorer countries that are dependent on the International Development Association (IDA) and bilateral aid for development finance. When they are under temporary balance-of-payments strain, because of a fall in their export prices or a harvest failure or a policy error, they have nowhere else to turn but the Fund. In the case of most member countries of the IMF, it is simply not true that private sector lenders provide more financing than the Fund does. When Mr. Smith formulated his proposal, he must have been thinking of countries like Brazil and Mexico, not Bangladesh or Somalia or Haiti or dozens like them.

Another objection to the proposal that the IMF should become only a credit appraiser is that the banks recently displayed less than warm enthusiasm about lending to countries that have received the IMF seal of approval. The term "involuntary lending" has been used to describe the process by which the IMF, with some help from central banks and governments, persuaded the banks to lend to Mexico and Brazil last year and again this year. This is a complex subject and we do not have to explore it fully to make the point that the lending by the IMF was a necessary condition for the bank lending that Mr. Smith would like to rely on completely. The IMF lending was necessary in two senses. The banks are unlikely to have agreed to lend unless the IMF was also putting in funds. Second, the amounts the banks were willing to lend would not have been sufficient and needed to be supplemented by the IMF.

On the basis of these considerations, one can conclude that the IMF should be even a larger lender than it has been in the past two or three years. A person of Mr. Smith's philosophy cannot be happy about involuntary lending. On the other hand, no one can deny that Brazil and Mexico, not to mention other countries, needed to borrow heavily. To a large extent, their balance-of-payments problems were not of their own making but were the result of the combination of recession and high interest rates in the industrial countries. The only alternative to involuntary lending would have been even larger loans from the IMF. That would have called for an even bigger increase in the IMF quotas, which Mr. Smith opposed.

Mr. Smith's response to this point would be, judging from his paper, that financing by the IMF makes the situation worse. He believes that external shocks and internal mismanagement create the need for painful adjustments which the IMF financing delays. Recession and high interest rates in the industrial countries are external shocks. It is simply poor economics to argue that developing countries subject to these shocks must reduce their living standards correspondingly instead of having the deflationary shock cushioned by temporary loans.

On the basis of Mr. Smith's arguments, one must conclude that he is opposed to unemployment compensation arrangements within countries. If mismanagement by corporate executives or by national policy makers leads to increased unemployment, the workers and their families should make do on their own, unless they can borrow from private sources. The lending function of the IMF is the international counterpart of governmental programs designed to protect families from temporary and reversible economic events that would require them to cut their living standards drastically. It is possible, of course, that Mr. Smith opposes such programs. That would make him consistent.

Performance of Major Borrowers

Mr. Smith is opposed to "providing the IMF with the wherewithal to bail out any nation and its bank creditors when poorly thought through investments go sour" (p. 231). He attacks Brazil in particular for a history of wasteful investment. I wonder how well Mr. Smith knows the record of economic performance in Brazil. The fact is that real GNP in Brazil increased at an average annual rate of more than 8 percent from 1970 to 1981. Wasteful investment is not likely to have generated such an impressive rate of growth. And Brazil is on its way to becoming an industrial country. About half of its exports are industrial goods. Moreover its export volume increased at an average rate of 8.7 percent per year from 1970 to 1981. Not all these exports could have been subsidizied. Brazil must have been using the inflow of capital productively. As a matter of fact, Brazil is now exporting commuter aircraft to the United States and other countries.

Thus I strongly disagree with Mr. Smith's appraisal of Brazil's economic record. The relevance of this to the subject at hand is that

Brazil's impressive growth and export performance came to an abrupt halt only when the industrial countries went into recession and when interest rates rose to astronomical levels. Brazil's export prices, measured in dollars, fell 20 percent from 1980 to 1982. The volume of its exports, after rising 8.7 percent per year for more than a decade, fell almost 9 percent in 1982. Meanwhile, the Eurodollar interest rate to which most of Brazil's bank loans are linked rose to almost 17 percent in 1981. Thus if there ever was a case that fits the original purposes of the IMF, it is Brazil in the past three years.

As to the analogy between the banks that have loaned to Mexico and Penn Square, an important difference is that the investments in Mexico have not failed. Mexico's petroleum exports have continued to increase. In April of 1983, the latest figure available to me, the volume of these exports was double what it was in 1980. No doubt, Mexico made policy mistakes. But it was also hit by the sharp rise in interest rates to which I have referred. In any event the Fund has done nothing to prevent the bankruptcy of individual enterprises in Mexico. If such failures occurred, the lending banks would have had losses, just as Penn Square did.

Concluding Comment

I conclude with the hope that Mr. Smith will direct his zealous energy to a worthier cause, such as the fight against protectionism, instead of working to weaken one of the most successful and effective international institutions. This world of growing interdependence needs a stronger, not a weaker, International Monetary Fund.

INTERNATIONAL DEBT, BANK FAILURES, AND THE MONEY SUPPLY: THE THIRTIES AND THE EIGHTIES

Roland Vaubel

Introduction

There have been fears that the foreign debt problems of several developing countries might spark a series of bank failures and another Great Depression. These fears seem to have been a major reason for the reacceleration of U.S. monetary expansion from the third quarter of 1982 to the second quarter of 1983, and for the recent increase in IMF quotas by almost 50 percent. Is it true that the situation in 1982–83 was similar to the one that led to the Great Depression in the 1930s, and, if so, was it necessary or appropriate to increase monetary expansion and IMF lending in these circumstances?

Looking for analogies, we might mention the following similarities:

1. In both instances, there was a decline in real income that was widely attributed to the preceding deceleration in U.S. monetary expansion.
2. With respect to both periods, there was considerable disagreement about the extent to which the demand for real dollar balances may have increased (as a result of falling interest rates, currency substitution, financial deregulation, or increasing risks, etc.).
3. In both instances, interest rates were unusually high relative to contemporaneous rates of price-level change.
4. In both cases, some authors attributed the decline of real income primarily to real disturbances and maladjustments.

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5. Both periods were characterized by a stronger dollar, an improvement in the U.S. terms of trade, and an increase in the U.S. capital account balance.
6. In both cases, U.S. foreign lending was part of an international recycling process, foreign debtors suspended their debt service, and the creditor countries granted official emergency loans.
7. In both instances, the decline in real income was associated with increased protectionism.
8. In both instances, the difficulties of the other countries were attributed to U.S. economic policies (monetary and fiscal policies, insufficient lending, protectionism).
9. In both instances, the decline in real income was widely attributed to a lack of international coordination of economic policies and to the lack of a recognized world leader.

Are these merely superficial similarities? What do they imply? The following analysis is devoted to these questions. It closes with a section on the role of bank failures in the Great Depression and on the prospective implications of major bank failures now.

Monetary Causes

Following Friedman and Schwartz (1965), most U.S. economists nowadays seem to agree that the severity of the Great Depression cannot be explained without reference to the unprecedented contraction of the U.S. money supply. From August 1929 to March 1933, the broad money supply (M2) decreased by more than a third. In the five years from April 1928 to April 1933, M2 declined at an average annual rate of 8.2 percent. Table 1 shows that the rate of change of

TABLE 1

RATES OF CHANGE OF BROAD U.S. MONEY SUPPLY (M2)
(PERCENT PER ANNUM)

1923–1928	4.4	1978 I –1979 III	8.5
1926 IV–1928 IV	3.6	1979 III–1980 II	5.6
1928 IV–1929 IV	−0.1	1980 II –1980 IV	12.5
1929 IV–1930 IV	−3.4	1980 IV–1982 II	9.0
1930 IV–1932 I	−14.0	1982 II –1983 I	14.2
1932 I –1933 II	−12.3	1983 I –1983 IV	8.5

SOURCES: Friedman and Schwartz (1970, Table 2); Federal Reserve Bank of St. Louis, *Monetary Trends*.

M2 declined much more and much longer in 1928–32 (by 17.6 percentage points) than in 1980 IV–1982 II (by 3.5 percentage points). Moreover, while the thirties saw a dramatic contraction of the money supply, the first one-and-a-half years of the Reagan administration merely brought a somewhat slower expansion of the money supply. This explains why the U.S. consumer price level fell by almost a quarter from 1929 to 1933 but continued to rise in the 1980s.

However, if we look at the annual rates of change of the consumer price index (Table 2), we discover a striking similarity. In both episodes, the rate of price-level change declined by a maximum of 10.3 percentage points, and in both cases it did so over a period of three years. In the 1930s, it decreased from zero percent in 1928–29 to minus 10.3 percent in 1931–32, and in the 1980s, it declined from 13.5 percent in 1979–80 to 3.2 percent in 1982–83. Does this mean that, before the monetary reacceleration starting in the summer of 1982, we had been on the verge of another Great Depression? The answer is no, because severe disinflation tends to produce smaller output losses than severe deflation.

One reason for this is that a deflationary monetary contraction is less likely to be expected than a disinflationary monetary deceleration. Second, deflationary monetary shocks, once they occur, are less likely to be considered permanent than an unexpected disinflationary monetary deceleration. For both reasons, a deflationary monetary policy affects prices less and output more than a disinflationary monetary policy. Moreover, for the same reason, it is probably more difficult to cut nominal wage rates than to reduce nominal wage increases. The deflation in the 1930s was not likely to be considered

TABLE 2

RATES OF CHANGE OF REAL GNP AND CONSUMER PRICES IN THE UNITED STATES.
(PERCENT PER ANNUM)

	Real GNP	CPI		Real GNP	CPI
1923–28	2.8	0.0			
1928–29	6.7	0.0	1979–80	−0.4	13.5
1929–30	−9.9	−2.5	1980–81	1.9	10.4
1930–31	−7.7	−8.8	1981–82	−1.7	6.1
1931–32	−14.8	−10.3	1982–83	3.3	3.2
1932–33	−1.9	−5.1			
1929–33	−29.2	−24.4	1979–83	3.1	37.2

SOURCES: Department of Commerce, Bureau of Economic Analysis (1973) and *Survey of Current Business*, selected issues.

permanent because it had been preceded by seven years of almost complete price-level stability and steady monetary expansion.[1] By contrast, the disinflation in the 1980s followed several years of highly variable inflation and monetary expansion rates; there was no firmly entrenched expectation of a permanent inflation rate.

According to an alternative hypothesis, the deflation was largely expected and led to greater output losses than a disinflation of equal size can, because the constraint that the market rate of interest cannot become negative matters only in the case of deflation. If the expected rate of price-level decline exceeds the real rate of interest that would prevail in nondeflationary equilibrium, money becomes more attractive than financial investments, and the credit market collapses. In this way, deflation can aggravate the shortage of money much more than severe disinflation can, even if both are expected and of equal size. This non-Keynesian version of the "liquidity trap" is consistent with the fact that real money balances increased from 1929 to 1931, but this increase amounted to only 3.1 percent.

The monetary interpretation of the Great Depression has not remained unchallenged. This is especially true for the initial phase up to the summer of 1931. The following objections seem to be most noteworthy:

1. Two econometric studies (Gordon and Wilcox, 1981; Bernanke, 1983) indicate that only part of the contraction can be explained by monetary and price changes.[2] However, other estimates over a longer sample period have shown that nominal income in 1930 was not smaller than was to be expected from the monetary deceleration, provided that reverse causation from income to money was negligible (Lothian 1981, p. 139). It is rather nominal income in 1929 which was inexplicably large. Anyhow, the main advocates of the monetary interpretation of the Great Depression do not exclude the possibility that, to a lesser extent, nonmonetary causes may have been at work as well (for example, Friedman and Schwartz 1965, p. 4; Meltzer 1978; and Brunner 1981, pp. 332–33).

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[1] Streefkerk (1983) shows that, during the Great Depression, monetary shocks had a significant impact on deviations of actual from permanent output growth and that a low variance of monetary expansion rates made for larger output deviations in response to monetary shocks.

[2] According to Gordon and Wilcox (1981, p. 67), the monetary slowdown "can only account for 18 per cent of the observed decline in nominal income in the first year of the contraction and 26 per cent cumulatively in the first two years." Bernanke (1983, p. 269) estimates that monetary and price shocks capture no more than half of the total decline of output between mid-1930 and March 1933. For a similar view see Temin (1976, pp. 14, 86 ff.) and his reference to Friedman and Meiselman (1963, p. 188).

2. Keynesians, like Temin (1976, p. 169), have objected that monetary policy cannot have been restrictive between the stock-market crash in October 1929 and the devaluation of sterling in September 1931 because short-term interest rates declined rather than increased. However, given that interest rates had risen in the initial phase of the monetary deceleration (1928–29), the marked subsequent decline is clearly compatible with the monetary interpretation of the Great Depression: It may have been due to a fall in the expected rate of price-level change[3] and/or to a decline in the real rate of interest. The real rate of interest may have fallen because the scarcity of short-term securities relative to goods increased more than the scarcity of money relative to goods. The increased scarcity of short-term securities relative to money may have been caused by an increase in the demand for short-term securities[4] and by a decline in their supply.[5] Whichever explanation may apply, *the Keynesian objection merely repeats the crucial mistake (committed by the Fed at the time) of judging monetary ease or restraint from the behavior of market rates of interest.*
3. Temin (1976, p. 142) has also objected that the increase in the real money stock was inconsistent with the assumption of monetary stringency. Against this, the adherents of the monetary interpretation correctly point out that the increase in the real money stock can easily be explained by an increase in the demand for real dollar balances.[6] Real money demand is likely to have been raised by the interest rate decline, the risk effects

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[3] For this view see Gandolfi and Lothian (1977, p. 685), Mayer (1978b, p. 140); and Meltzer (1978, pp. 458–59). Wholesale prices had been falling at a rate of over 12 percent from August 1929 to August 1930; moreover, deflation had occurred previously, notably in 1920–21 when it was three-to-four times as fast. Meltzer (ibid.) reports that the actual rate of decline of the GNP deflator in 1930–31 corresponds closely to his estimate of the anticipated rate.

[4] Mayer (1978b, pp. 139 ff.), Meltzer (1978, p. 462), Schwartz (1981, p. 32), and Lindert (1981, pp. 127–28). In particular, there could have been a dramatic demand shift from private long-term securities and real assets to riskless short-term securities eligible for discounting. Note that if this was the case, it would have been more appropriate to issue money *and* government securities (to finance a budget deficit) than to issue money in exchange for government securities (expansionary open market operations or rediscounting).

[5] See Brunner and Meltzer (1968, p. 347), and Schwartz (1981, pp. 32, 37). The supply of government debt declined until the end of 1930.

[6] For this hypothesis see, for example, Friedman and Schwartz (1965, p. 11), Friedman and Meiselman (1963, p. 188), Gandolfi (1974), Gandolfi and Lothian (1976, 1977), Mayer (1978b, p. 139), Schwartz (1981, p. 39), Brunner (1981, p. 340), and Flood and Garber (1981, p. 23).

of the stock-market crash and the banking crises,[7] and by currency substitution in favor of the dollar.[8] The fall in real income, meanwhile, should have affected real money demand very little if it was largely regarded as transitory. Indeed, the cross-state estimates of Gandolfi and Lothian (1976) reveal that the money demand function had been basically stable during the Great Depression and that the remaining deviations were predominantly secular rather than cyclical.

Real Causes

High unemployment and slow growth in the eighties have often been attributed to real rather than monetary causes: the second oil price increase, increasing real wage resistance, inflation-induced distortions in the pattern of production, or even long waves of economic development. Some of these are real shocks, while others represent structural changes that must have developed over many years.

Real shocks have also been adduced to explain the Great Depression:

1. Originally, Keynes and his followers had believed that a sudden decline of investment demand caused the Depression. The modern Keynesians have given up that claim except perhaps with respect to residential construction, which declined for demographic reasons (Temin 1976, pp. 63 ff.; Gordon and Wilcox 1981, p. 77).
2. The new Keynesian view is that there was an autonomous decline in consumption that cannot be explained in terms of income, wealth, or risk changes (Temin 1976, pp. 71 ff.). However, more sophisticated estimates of the consumption function are not consistent with this hypothesis (Gandolfi and Lothian, 1977; Mayer 1978a).
3. Was the Depression triggered by an autonomous decline in the dollar value of U.S. exports, notably agricultural exports, as Kindleberger (1973) suggests? This is unlikely because real net exports hardly changed from 1929 to 1930, the U.S. experienced gold inflows from mid-1929 to mid-1931, and exports accounted for less than 6 percent of U.S. GNP. However, the world agricultural depression, which had begun in 1925, may go a long

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[7] However, Friedman and Schwartz (1965, p. 57) conjecture that the bank failures, taken by themselves, reduced the demand for money because currency was not a perfect substitute for deposits.

[8] Flood and Garber (1981, p. 23).

way to explaining why the first bank failures occurred in the farm belt of the United States.[9]

4. Can the stock-market crash of October 1929 be considered a nonmonetary shock that caused the Great Depression? Since the crash occurred three months after the beginning of the downswing in production and about a year after the beginning of the monetary deceleration, it can probably not be viewed as independent of monetary causes. Moreover, much of the stock-market decline was soon reversed: the Dow Jones index which on October 29 declined to 198 (after a peak of 381 on 3 September) recovered to 250 by the end of the year. In April 1930, the index was only 20 percent below its September peak—a smaller decline than in many nondepression episodes. *The wide fluctuations of stock-market prices rather indicate that the public was highly uncertain about the severity of the recession that had begun, and about the monetary policy which the Fed would follow after the death of Benjamin Strong in 1928.*

Among the long-run structural changes, various authors have emphasized the increasing cartelization of the labor market, the weakening of the banking system, capital waste, reparations and war debts, and the misalignment of gold parities in the twenties.[10] Each of these factors may have contributed, especially by increasing the fragility of the German and the British economy, but given the monetary deceleration and the risk-induced preference for liquid assets, none of them seems to be necessary to explain the ultimate severity of the contraction. The same is, of course, true for the long-wave view. In the thirties as well as in the eighties, long-run structural changes are more likely to explain the trend increase in unemployment and the long-run productivity slow-down than the cyclical troughs.

International Lending

An unexpected monetary deceleration is bound to affect output, the price level, and the terms of trade in such a way as to render debt service by foreign borrowers more difficult. The demand for imports from the debtor countries declines, and the real value of the outstanding debt rises. This explains why defaults on international (and domestic) debt are most frequent in those periods. In the eighties, the number of international reschedulings suddenly rose from an annual average of about three in the seventies to 11 in 1981, and more than 20 in 1982. Similarly, by the end of 1935, in terms of par values, 39 percent of all foreign bonds traded on the New York Stock Exchange had ceased to be serviced; for instance, 80 percent of the Latin American bonds, 99.6 percent of the German bonds, and 23 percent of the other European bonds went unserviced.[11] During the 19th century, every major downswing seems to have caused failures of sovereign and other foreign borrowers to meet their external obligations.[12] This has led some authors to argue that such defaults are really implicitly agreed to among the contracting parties and that "maintaining debt service during world depression is generally impossible" and leads to "thoroughly unsatisfactory results" (Kindleberger 1978b, p. 9).

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[9] Other factors, like bank structure and management, played a role as well (see Gambs 1977; Wicker 1980; and Stauffer 1981).

[10] See notably Arndt (1944, pp. 276 ff.) and the survey in Haberler (1976, pp. 22–30).

In the thirties and in the eighties, an international recycling problem had to be solved. Under the Peace Treaty of Versailles, Germany was obliged to pay reparations (mainly) to France, Britain, Italy, and Belgium which, in turn, had to repay their war debt to the United States. The United States closed the circle by lending back to Germany—in fact far more than Germany paid in reparations.[13] In the 1980s, the industrialized countries rechanneled OPEC oil revenue to the non-oil developing countries. According to estimates by the Bank for International Settlements, the flow of OPEC funds dried up in mid-1982; at about the same time (1982 III), Euromarket lending to the non-oil developing countries began to decline.[14]

Apart from these striking analogies, there are two major differences between these episodes:

1. Today the creditors in the industrialized countries are largely banks. The OECD 1982 estimates that the non-OPEC developing countries owe more than 35 percent of their external debt to banks. In the thirties, the creditors were mainly individual bondholders—with the exception of Germany which, at the end

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[11] Madden, Nadler, and Sauvain (1937, pp. 111–25). The following countries suspended debt service on their bonds: Bolivia (January 1931), Peru (March 1931), Chile (July 1931), Brazil, Colombia (August 1931), Hungary (December 1931), Costa Rica, El Salvador, Greece (February 1932), Panama, Uruguay (May 1932), Austria (June 1932), Yugoslavia (November 1932), Cuba (December 1933), and Germany (July 1934). Some of them repudiated their debt.

[12] Madden, Nadler, and Sauvain (1937, p. 107).

[13] In 1924–30, Germany paid Rm. 10.3 billion in reparations and enjoyed a trade deficit of Rm. 7.8 billion.

[14] Bank for International Settlements, *Annual Report* for 1981–82 and 1982–83. OPEC lending to the industrialized countries amounted to $74.9 billion in 1980, $39.9 billion in 1981, and $5.8 billion in the first half of 1982. In the second half of that year, OPEC reimported capital ($8.6 billion) from the industrialized countries.

of July 1931, owed 69 percent of her external debt to foreign banks (and 20 percent to U.S. banks).[15] Since international debt to U.S. banks was relatively small in the thirties, the bank failures that played such an important role in aggravating the Depression were not caused by the defaults of foreign debtors.

2. Today the foreign debtors who have asked for rescheduling are mostly public authorities or state-owned companies. About 80 percent of long-term developing country debt is public or publicly guaranteed debt. In the thirties, a large part of the European foreign debt was owed by commercial banks and private enterprises. This was particularly true for Germany. At the end of 1930, 46 percent of her external debt was owed by private nonbanks, 35 percent by banks, and only 19 percent by public authorities.[16] The Weimar Republic, as long as it lasted, never defaulted on its external debt, nor did the German banks. But the government temporarily suspended and limited all payments by banks, obtained a temporary standstill agreement from the foreign banks that had lent to German banks (July-August 1931), and successively introduced exchange controls in 1932.

Thus, whereas in today's developing countries, capital imports by official institutions have largely served to offset capital exports by private citizens of these countries,[17] in the Germany of the 1920s, official payments to foreign creditors tended to be offset by private capital imports.

Since today's international creditors are largely banks and since international debtors are largely public authorities, the bargaining position of foreign debtors is now incomparably stronger than it was in the thirties. By threatening complete default on their foreign debt, the sovereign debtors of banks do not lose their borrowing potential at home and can play with the menace of bank failures and monetary disruptions in the creditor countries. There is evidence that the governments of the debtor countries are fully aware of the threat potential which they have at their disposal, especially if they combine to form a debtors' cartel. Since they could always pay their debt service by selling real assets and other claims in their possession (or offer real assets as collateral), it is in fact a matter of debate, or of definition, whether they are unable or unwilling to pay. The incentive to use extortion would be substantially reduced if the governments of the creditor countries made it clear that they are prepared to let some of their banks fail and are ready to prevent such bank failures from reducing the money supply and economic activity in their countries. The creditor banks, which have misjudged the debtor countries' ability to pay and/or their willingness to use them as hostages, would then face the decision of whether they can earn enough profits to cover the losses which the developing countries can impose on them; or whether their exposure to foreign debtors' default threats will merely be perpetuated, or even be aggravated, if the debt service obligations are rescheduled and compounded.

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[15] Harris (1935, p. 18). German debt to the United States amounted to 39 percent of its total foreign debt.

[16] Born (1967, p. 19).

[17] For instance, in the cases of Mexico and Argentina, half or more of the proceeds from foreign loans were reinvested abroad (Sjaastad 1983, pp. 313–14).

There is a school of thought that attributes the Great Depression in Europe to insufficient U.S. lending and argues that this mistake must not be repeated in the eighties.[18] Its members condemn those U.S. politicians—even the author of the Hoover Moratorium—who opposed more official lending for fear of prospective budget deficits (Kindleberger 1978a, p. 198) or of "sending good money after bad" (Kindleberger 1973, p. 298). They emphasize that conditionality imposed by private banks or national governments proved to be unacceptable in several cases,[19] and they suggest that what the world needed to avoid the Depression was an international lender of last resort, an International Monetary Fund (Kindleberger 1973, p. 298; 1978a, chap. 10). In their view, the European depression was caused by a series of accidental nonmonetary shocks that operated on international capital movements and should have been cushioned through official lending. The first of these shocks was the U.S. stock-market boom which, like the U.S. budget deficit now, diverted part of the world capital stock to the United States and raised real interest rates in Europe and elsewhere.[20] However, U.S. lending to Europe recovered in 1930.

The second accident in this story was the outcome of the German elections in September 1930 which raised the number of seats held by the fascist NSDAP from 12 to 107 and led to large-scale withdrawals of foreign funds from German banks. The accidental collapse of the Austrian Kreditanstalt in May 1931 finally set a chain reaction in motion: the run on the German banks (June-July), the withdrawals from London and the devaluation of sterling (September), the large-scale withdrawals from New York (September-October), and another series of bank failures in the United States (October-January 1932). "In view of this history," Kindleberger concludes, "I find it impossible to understand the view that the 1929 depression was of domestic origin in the U.S." (1978a, p. 137).

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[18] See notably Arndt (1944, pp. 254, 292) and Kindleberger (1973, 1978a).

[19] The French government was not prepared to grant credits to Austria and Germany unless they renounced their customs union agreement (Kindleberger 1978a, p. 197), and the British Labour government collapsed over the policy conditions attached to the bank loans (the "bankers' ramp") of August 1931 (Kindleberger 1978a, p. 225).

[20] The data are presented by Harris (1935, p. 7), Kindleberger (1973, pp. 71–3) and Temin (1976, p. 154). Temin rejects this view on the grounds that the lag of transmission from the money supply to output (which dropped 4.3 percent in 1929) would have been implausibly short. He attributes the beginning of the German depression to a decline in inventory investment.

The monetary interpretation of the Great Depression rejects this story as a superficial description of events that were either not exogenous or unnecessary to explain the European disaster. Given the monetary deceleration in the United States and the fixed parities of the gold-exchange standard, a depression in Europe was inevitable; even a much larger volume of official international loans would not have prevented it. The reserve losses of the European central banks and the contraction of the European banking system were merely the necessary implication of U.S. monetary stringency and exchange rate fixity. Given that dollars had become scarcer, the fixed exchange rates could only be maintained if the European currencies were also made correspondingly scarcer. Germany's fatal handicap was that the Young Plan, which had been accepted at the Reparation Conference of the Hague (1929–30), did not permit her to abandon the gold parity of the Reichsmark.[21] Germany was not free to follow the example of Britain and several other European countries which cut loose the exchange rate link with the dollar and reduced their income losses considerably.[22]

No doubt, more official lending to the deficit countries would have mitigated the European downswing to some extent. The European terms of trade would have deteriorated somewhat less, and the decline of the European price level that was required at the given parities would have been a little smaller. But official lending would have been far less effective than exchange rate depreciation. Moreover, it would have been less efficient; for to the extent that it had not generated offsetting private capital movements, official lending would have distorted the international allocation of capital.

Today most of the debtor countries which have asked for rescheduling are on a flexible exchange rate, and all of them are free to choose the exchange rate regime they like. They do not need credits from foreign official institutions in order to avoid deflation (a falling price level). Even under flexible exchange rates, open economies are bound to be affected by real economic changes in the rest of the world. If they are adversely affected by a foreign recession, they face the choice between financing and adjustment. But if there is no private lender who considers them credit-worthy, why should they be able to borrow taxpayers' money?[23]

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[21] For a detailed analysis of this problem, see Schiemann (1980, esp. pp. 167 ff.).

[22] For international comparisons, see Gordon and Wilcox (1981), Lothian (1981), Jonung (1981), and Ahnefeld et al. (1982).

Protectionism and International Coordination

In the thirties, just as in the seventies and eighties, high unemployment strengthened the protectionist sentiment. There seems to be general agreement now that mounting U.S. tariffs and the retaliation in Europe and elsewhere aggravated the decline of world trade and economic activity. Probably the most dramatic step was the imposition of the Smoot-Hawley Tariff of June 1930, which raised duties very substantially, notably those on agricultural imports. As Sachs (1982, p. 226) points out, U.S. protectionism was a major cause of foreign defaults not only because it reduced the exports of the debtor countries but also because, by aggravating the decline in their terms of trade, it increased the opportunity cost of remaining solvent and thus the incentive to default. There is an important lesson to be learned from this experience. However, as has been mentioned above, for rather closed economies like the United States, the increase in trade barriers cannot have been a major cause of the disaster.

Those who believe that the Great Depression cannot be explained without reference to the changes in international trade and capital flows that accompanied it see the main lesson in a need for closer international coordination. According to Arndt (1944, p. 295),

> the first conclusion which has emerged inescapably from this analysis is that we can no longer let the co-ordination of national economic policies look after itself or rely on an 'automatic' international system. . . . Its place must be taken by some system of direct co-ordination of national economic policies, whether by means of international co-operation or supranational control.

In the seventies, this interpretation has been taken up by Kindleberger:

> The world economic system was unstable unless some country stabilized it [1973, p. 292]. . . . The lack of leadership in providing discount facilities, anti-cyclical lending or an open market for goods rendered the system unstable [1973, p. 295]. . . . The danger is . . . that in a future crisis, as in 1931, countries and international orga-

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[23] For a detailed critique of official balance of payments credits, see Vaubel (1983b).

> nizations will try to shrug the responsibility for international stability off on to other shoulders [1978a, p. 226].

Are these the lessons we have to draw for the eighties?

The Great Depression did not arise because national monetary authorities ignored their responsibility to the rest of the world, but because they acted against their own country's interest. Of course, U.S. monetary policy also affected the rest of the world, but this was not an externality of "public bad" in the welfare-theoretic (Pareto-relevant) sense of the word, as Kindleberger believes (1973, p. 301; 1978a, pp. 12, 220, 223, etc.). It was simply interdependence through the market. Individual supply decisions in the world market do not have to be coordinated through negotiations merely because they also affect others. In this respect, there is no difference between the supply of money by the Federal Reserve and the supply of automobiles by General Motors. It is the market that acts as a mechanism of coordination. *Interdependence through the market is not a valid justification for nonmarket coordination.* Nor is there a valid game-theoretic case for monetary policy coordination, when politicians cannot be relied upon to pursue the national interest.[24]

The problem in the thirties was not that there was too little international monetary collusion but that there was too much of it. The problem was that the gold-exchange standard had created a price cartel of money suppliers, that the price leader misjudged his own interest, and that the other members did not abandon collusion (their parities) in time. To call the devaluations which ultimately resulted "beggar-thy-neighbor policies" is to misjudge the case completely; for, given the U.S. monetary contraction, devaluation vis-à-vis the dollar was required to stop the price level from declining in the rest of the world. The justification was price level stability, not international competitiveness.

What has been said about monetary policy coordination is not true for international cooperation in the field of trade relations. This is because trade restrictions interfere with the market process and impose Pareto-relevant externalities on other nations. Thus, there is a sound economic case for international trade agreements to avert protectionism. However, as has been mentioned before, such negotiations—even if successful—would not have prevented the Great Depression.

Bank Failures and the Money Supply

Bank failures played a crucial role in the propagation of the Great Depression. From August 1929 to March 1933, more than one-fifth of all U.S. commercial banks with nearly one-tenth of the volume of deposits suspended operations. In Germany, the whole banking system collapsed temporarily in mid-July 1931; several large banks were nationalized in February 1932. Does this mean that another Great Depression is bound, or is likely, to follow if large banks are permitted to fail over their "bad loans" to non-oil developing countries? There are three issues to be distinguished here:

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[24] For a detailed critique of the various arguments in favor of international coordination of national macroeconomic policies, see Vaubel (1983a).

1. Would the collapse of a few large banks trigger runs on other banks and endanger the whole banking system?
2. Can the monetary authorities prevent bank failures from affecting the money supply?
3. Would bank failures have a depressive effect on the economy, even if they are not permitted to reduce the money supply?

The answer to the first question depends on the size of the initial losses, the extent of deposit insurance, and the policy rules followed by the monetary authorities. It is useful to distinguish fears of insolvency and fears of illiquidity as possible causes of a run on banks. In the pure insolvency case, the failure of some large banks will not trigger a run on the other banks unless the losses of the failing banks exceed their own capital to such an extent that the resulting net losses of the other banks are expected to exceed the latter's own capital. This is not the situation we are facing today. Moreover, most depositors are protected by the FDIC.[25] If, for some reason, the authorities feared a run nevertheless, the most appropriate action would be deliberately to liquidate banks that are technically insolvent.[26] If "bad loans" are the problem, the prevention of a banking crisis is not a sufficient reason for increased monetary expansion and official subsidized lending to foreign debtor countries.

An individual bank cannot face a liquidity problem—as distinct from a solvency problem—unless there is a general liquidity crisis; for in the absence of such a crisis, each bank can always increase its liquidity by selling long-term assets in the market for what they are worth.[27] It is the task of the monetary authorities to avoid liquidity crises. They do this by increasing the money supply in a steady and preannounced manner—even in the face of bank failures. By purchasing bonds in the open market and by discounting loans or other assets, they can maintain monetary expansion and the prices of financial assets at the same time. If a bank fails because of bad loans and if it is not immediately taken over by some other bank or company, the central bank can even supply money directly to the creditors of the defaulting bank in exchange for receivership notes which it accepts at some safe fraction of the original book value of the claim.

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[25] Nor has it been the case in the seventies. Herzig-Marx (1978), for example, has shown that, in 1970–76, 60 percent of the losses from U.S. bank failures were borne by stockholders, 31 percent by the Federal Deposit Insurance Corporation (FDIC), 8 percent by bondholders, and only 1 percent by depositors.

[26] "This approach, harsh as it may seem, would appear to be the only way in which the enormous risk of moral hazard may be avoided in the future" (Sjaastad 1983, p. 318).

[27] Sjaastad (1983, pp. 316–18).

The most interesting and controversial of our three questions is the last: Do bank failures depress the economy if they do not affect the money supply? Friedman and Schwartz (1965, p. 56) have been explicit on this point:

> The bank failures were important not primarily in their own right, but because of their indirect effect. If they had occurred to precisely the same extent without producing a drastic decline in the stock of money, they would have been notable but not crucial. If they had not occurred, but a corresponding sharp decline had been produced in the stock of money by some other means, the contraction would have been at least equally severe and probably even more so.

Cagan (1965, p. 267) has reached the same conclusion for a far longer period of U.S. history:

> Panics made ordinary business contractions severe when they led to substantial decline in the rate of monetary growth, and not otherwise. Substantial decline in this rate, by itself with no panic, could and has produced severe business contractions.

More recently, this view has been challenged by Kindleberger (1978a, p. 72), Diamond and Dybvig (1983, p. 403), and notably Bernanke (1983). Runs and bank failures, they suggest, depress the economy not only through the money supply but also by raising the cost of credit intermediation. In this way they reduce aggregate demand, interrupt production (when loans are called), and prevent optimal risk sharing among depositors. Bernanke presents evidence that real deposits of failing banks and liabilities of failing businesses help significantly to explain the U.S. output changes in 1919–41, in addition to money-supply shocks or price-level shocks. In his regressions, surprisingly, the money-supply shocks and price-level shocks affect industrial production only within the same month and the following month. It is not clear what Bernanke's results imply. They might merely indicate that the bank failures led to a risk-induced increase in the demand for money or, as he concedes (p. 271), that they were caused by, or at least associated with, anticipations of output decline.

Bernanke (p. 274) also emphasizes that "the countries in which banking crises occurred (the U.S., Germany, Austria, Hungary, and others) were among the worst hit by the depression." However, this is also predicted by the monetary interpretation; for Germany, Austria, and Hungary did not devalue their currencies like most of the other countries [28] and they followed the U.S. monetary lead to the bitter end.

If the increasing cost of credit intermediation contributed to the severity of the Great Depression at all, it can only have done so because the monetary authorities permitted large risk premia to develop. However, these risk premia were not the inevitable consequence of the bank failures. They reflected the public's *uncertainty* about how the monetary authorities would react to the bank failures. Therefore, another lesson we have to draw from the thirties is that our central banks should commit themselves to prevent such bank failures from reducing monetary expansion below the preannounced target rate. Once this guarantee has been given, banks—even large banks—can, and (as we have shown) should, be liquidated, if they are technically insolvent:

> To many practical people the suggestion that a large bank be allowed to fail may seem to represent dogmatic adherence to standard economic doctrine, a victory of ideology over pragmatic common sense. . . . But this pragmatic position shoud be rejected. . . . If we prop up a large bank . . . , in the future the same benefit will then probably be accorded to medium-sized banks. And from there it is likely to spread to small banks, to other financial institutions and ultimately to other firms. . . . At a time when devotion to pragmatism is so much in the air it is useful to consider also the benefits of sticking to one's principles even in hard cases. [Mayer 1975, pp. 609–10]

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[28] See Chandler (1970, p. 105, Table 6.4).

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BANK FAILURES AND MONETARY POLICY

Lawrence H. White

Introduction

The degree to which a number of U.S. banks have exposed themselves to the threat of loan default or debt repudiation by the governments of several developing nations is alarming. It raises a critical public policy question: Should the United States' monetary authorities be advised to allow major banks to fail on account of bad loans? Or should their money-creating powers be used to support the banks? Roland Vaubel's paper (1984) has intelligently tackled this question, though it is by no means the only question treated in a paper rich with historical information. Vaubel's answer, in capsule form, is: The authorities can and should liquidate insolvent banks, whatever their size, provided that they do not allow the money supply to contract as they did in the 1930s.[1] The first part of this answer deserves the utmost commendation. In the following section I will try to amplify the reasons. Vaubel's proviso regarding the money supply, on the other hand, raises further questions concerning the rationale of monetary policy.

The Case for Bank Failures

There are basically two ways of arguing the case that insolvent banks should be allowed to fail: First, that it is the expedient thing to do; second, that it is the just thing to do. Vaubel makes the expediency case primarily on two grounds. His first ground for a willing-to-liquidate-failures policy is the interesting idea that a creditor nation's

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[1] It should be emphasized at the outset that a bank "failure" or "liquidation" typically involves the relatively nondisruptive process of merger into a solvent bank or other firm.

government's readiness to allow domestic banks to fail is an effective tool in resisting possible "blackmail" threats from the debtor nations' governments. These threats presumably take the form: Extend me further subsidized credit or outright aid, or I will default on my debt obligations to your banks. (Technically one should consider this extortion rather than blackmail, the difference being that a blackmailer is entitled to do that which he threatens.)

The desirability of resisting such threats from the point of view of the representive citizen of the creditor nation should be clear: Domestic government grants to a debtor-nation government for the purpose of forestalling default, financed by money creation or overt taxation, amount to nothing more than roundabout transfers from other domestic citizens to the shareholders of the threatened banks. The taxpayers are being asked to bail out the banks. If they wished to do so (surely not all do), they could do so domestically, cutting out the debtor-government middleman. It is doubtful that $1 million transferred to default-threatening governments will often enrich domestic bank shareholders by as much or more than a million dollars; that is, will result in more than $1 million of debt being repaid that would otherwise have been repudiated. An "investment" of this sort with an unwilling debtor is unlikely to pay a positive rate of return. In the event that it does seem likely to, the creditor banks should be fully willing to extend aid at their own expense.

Thus, as Vaubel indicates, the creditor banks can and should be left to make the decision on whether the act of lending a debtor nation the money it claims to need to cover its interest payments is an act likely to reduce or increase the loss of principal. Willingness to let banks fail is the only way to keep banks from shifting the burden of a mistaken decision onto taxpayers and holders of base money. Keeping the costs and benefits of a decision internal to the decision maker is, of course, the only way to ensure that a prudent decision is made.

A policy of insuring every large bank against failure—no matter how egregious the loan policies that rendered it insolvent—creates a moral hazard problem of potentially huge dimensions. It attenuates the proper incentives for large banks to loan out their funds prudently. (Regrettable as the monetary and real-side shocks of the past decade have been, it is difficult to accept the argument that no imprudence should be seen in the banks' failure to prepare for the possibility that a serious recession could sour their loans to less developed countries.) If loan losses in excess of equity do not force a bank into liquidation, then the risk that losses will exceed equity will no longer enter the bank's decision calculus with a heavy enough weight. If bankers who make unprofitable loans are not forced out of business, the economy's scarce loanable funds (and the complimentary resources that go into banking) will not be directed to their most productive uses. Allocative efficiency requires that major banks be as free to fail as firms in other industries.

Vaubel's second ground for the expediency of letting insolvent banks be liquidated in timely fashion is that this policy actually reduces the risk of a banking panic. Depositors may run on a bank if they fear that it is insolvent, and hence unable to redeem the claims of all but the first in line to demand redemption, yet the bank remains in business. A policy of promptly liquidating insolvent banks before their net worth falls too far below zero will accomplish two things: First, it will limit the losses of bank liability-holders or whoever else bears the deficiency (in particular those who bear the burden of funding deposit insurance) in each particular case; and second, it will reassure depositors that functioning banks really are solvent.

The ethical case against increased monetary-base expansion or tax-subsidized lending to debtor governments as methods of aiding domestic banks—a case Vaubel does not make—is simply that bank shareholders are not entitled to involuntary transfers from moneyholders or taxpayers. It is obvious that aid grants or lending programs are redistributive when financed by explicit taxation. They are no less so when financed by an expansion of the monetary base that covertly taxes holders of existing base money by diluting the value of their holdings. Indeed any injection of new base money is redistributive unless granted proportionately to holders of existing base money, regardless of whether its ostensible purpose is to forestall a recession or a banking panic.

Monetary Policy and Liquidity Problems

Vaubel points out (p. 262) that any individual bank finding itself illiquid can readily increase its liquidity by selling some of its marketable assets (or, he might have added, by borrowing from other banks), provided there exists no "general liquidity crisis." He then asserts plainly, evidently not anticipating much argument, that "It is the task of the monetary authorities to avoid [such] liquidity crises." Assigning an active task to government generally requires some justification. To justify a government monetary role, one would have to overcome an extremely thorough critique recently made of welfare-theoretic arguments on behalf of government monopoly in the production of base money. The author of this critique is, ironically enough, Roland Vaubel himself (1982). This is not the place to pursue the issue in depth, as the question of whether government has any legitimate monetary role was among the topics treated in last year's monetary conference volume (*Cato Journal*, Spring 1983).[2] But it remains an issue and an issue relevant here. Whether a government monetary role is justifiable, and if so, how, are questions difficult to disentangle from the rationale of the lender of last resort.

The monetary policy Vaubel seems to favor in the present paper is one of controlling the money supply through open market operations and rediscounting. In particular, to avoid a "general liquidity crisis," Vaubel would have the central bank "increasing the money supply in a steady and preannounced manner—even in the face of bank failures" (p. 262). This means controlling some aggregate of inside and outside money such as M1 or M2. But the desirability of controlling M1 or M2 rather than the monetary base is unclear. For one, there is the uncomfortable possibility that attempting to control an aggregate containing some measure of inside monies necessarily implies inefficient restrictions on the intermediary functions of banks.[3]

A policy of controlling some broad measure of money entails varying the supply of base money in order to offset changes in the demand for base money. Any increases in the public's desired currency-to-deposit ratio and in the banks' desired excess reserve ratio, both of which reduce the volume of M1 and M2 that a given stock of base money will support, are to be counteracted by additions to the stock of base money. Holders of existing base money are to be denied the appreciation in the value of their holdings that would otherwise occur—in other words, they are implicitly taxed.

A policy of varying the monetary base to control M1 or M2 is obviously inconsistent with freezing, or even targeting at some positive growth rate, the monetary base. (Why is it inadvisable to try to offset changes in the demand for M1 or M2, but not changes in the demand for base money?) This policy is also inconsistent with being part of a fully unified currency area—for example, an international gold standard—and thus having an endogenous money stock and monetary base. Vaubel's disparagement of the gold-exchange standard of the 1930s as an inter-central-bank cartel has some truth to it: To the extent that national currencies were independently manipulated by their central banks, fixed exchange rates did represent a form of price fixing. But this does not touch the question of whether the United States or any other nation should be an independent currency area with fiat money and floating rates, or instead part of a larger unified currency area based on gold or some other nongovernmental money. Vaubel leaves the impression that fiat money and floating rates could be justified by a prior need for a lender of last resort; that is, for an agency able to create high-powered money. But the "need" for a lender of last resort should not be taken for granted: Even if the stability of present arrangements relies upon it to some extent, alternative monetary arrangements might well make the function unnecessary.

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[2] See particularly the pieces by Salerno (1983), Yeager (1983), and White (1983).

[3] This possibility is raised by Fama (1983) among others.

The argument for a base-varying policy evidently rests on the supposed desirability of preventing "general liquidity crises." If so, the nature of these events needs to be carefully explained. The only characteristic that Vaubel mentions is that "the price of long-term assets is depressed." This suggests that interest rates are unusually high. But surely high interest rates or depressed asset prices are not a sufficient reason for injecting new base money at the expense of those already holding it. The alternative, when an increased demand for base money comes from illiquid banks, is to have the would-be-borrower banks sell off assets or offer interest rates high enough to attract deposits or bond purchasers or interbank loans. I do not mean to suggest that "liquidity crises" and economic recessions are in no sense regrettable. It is nonetheless not clear what about a "general liquidity crisis" constitutes a market failure that would rationalize circumventing the market mechanism for allocating the existing stock of scarce base money.[4] That an increased demand for base money can inconvenience unprepared banks seems to be a case of interdependence through the market, not a Pareto-relevant externality. Vaubel clearly recognizes this distinction, as he uses it himself.

A Final Note

One sensible measure that U.S. monetary authorities might take to lessen the chance of a banking panic relates to their regulatory powers rather than their control over the money supply. They could eliminate the archaic ban on interstate branch banking, which prevents banks from reaching the optimal size for risk-spreading purposes. As a supplement to Vaubel's account of the Great Depression, it may be noted that Canada, with its banks allowed to branch nationwide, experienced no bank failures and no runs on the banks during the depression.[5]

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[4] I do not believe that this question has been satisfactorily addressed in the economic literature. A recent attempt to address it is made by Diamond and Dybvig (1983).

Where the monetary authority imposes reserve requirements as the Federal Reserve does (these are an example of an interference with intermediation ostensibly for the sake of monetary control), it is possible that required reserves will exceed actual reserves for the banking system as a whole. The most straightforward way to eliminate this problem is to eliminate reserve requirements. The demand for base money they create is in some sense an artificial one.

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THE LENDER OF LAST RESORT: A HISTORICAL PERSPECTIVE

Thomas M. Humphrey and Robert E. Keleher

Introduction

The current international debt situation has led some analysts to suggest the possibility of a scenario whereby international debt defaults quickly lead to severe strains on domestic commercial banks. In this context, monetary and central bank policy become especially important, and references are often made to the central bank's function as lender of last resort (LLR). In considering stopgap versus permanent solutions to financial crises, the role of the lender of last resort assumes special pertinence.

Although often mentioned, few thorough assessments of the domestic LLR function exist. Moreover, the analytical foundations or theoretical framework underlying the LLR function are rarely if ever spelled out. Discussions of this central bank role are often premised on differing definitions or understandings of the function. As a result, semantic problems often cloud such discussions. Then too, clarifications of the LLR function under alternative monetary and exchange rate regimes have never been made. Consequently, analyses of the concept are frequently ambiguous. Because of this lack of clarity, analyses of this role often leave important issues unresolved. For example, is the LLR essentially a banking or a monetary function? Is the function microeconomic or macroeconomic in nature; that is, does LLR responsibility pertain to individual banks or to the market as a whole? Are the monetary control and LLR functions of a central bank irreconcilable? Does the LLR function differ under alternative

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monetary regimes? Is current Federal Reserve policy in accord with the original conceptions of this function? Can the role be carried out via open market operations or must the discount window always be used? This lack of clarity of the LLR function is evident in discussions of the domestic LLR. But the confusion becomes especially apparent in analyses of international financial crises and particularly when a role for an international LLR is proposed.

In an effort to dispel this confusion, it is useful to reassess this important central bank function. The purpose of this paper is to examine both the domestic and possible international roles of an LLR. We begin with a discussion of the function of an LLR. Next, a brief outline of the role of an LLR under various monetary regimes is presented. We then consider the historical development of the concept of a domestic LLR. Special attention is given to the work of Henry Thornton, the Banking School, and Walter Bagehot. A discussion of the possible role for an international LLR and some conclusions complete the paper.

The Function of the Lender of Last Resort

The call for an LLR arises because of two important institutional characteristics of contemporary monetary systems, fractional reserve banking and governmental monopoly of legal tender issuance.[1] The monopoly of legal tender issuance ensures that the central bank is the ultimate provider of currency and thereby the guarantor of deposit-to-currency convertibility. Once banks believed they could always obtain currency in a crisis from such a monopoly issuer, they reduced their holdings of reserves and began to hold assets they believed could be easily transformed into reserves (or legal tender). This contributed to a centralization of reserves under the custody of the monopoly issuer, the "central" reserve bank. The discussion of the LLR in this paper is premised on these given institutional arrangements. Thus, while we believe strongly in free competitive markets for all goods (perhaps including money) and are sympathetic in principle to the arguments of free-money advocates and their case against the LLR, we nevertheless intend to examine the function of existing LLRs under existing institutional arrangements.[2] We hope that such an examination will provide a better understanding of the role existing LLRs may play in banking crises and help us evaluate various proposals for an international LLR.

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[1] With 100 percent reserve requirements, an LLR would not be necessary. Moreover, monetary systems characterized by multiple issuers of transactions media could be proposed and indeed have existed without any apparent need for an LLR. The monopoly of legal tender issuance applied to the Bank of England by 1833. Even for several decades before that date, the Bank of England's notes were de facto legal tender. (White 1981a, 1981b; Smith 1936). In addition, it should be noted that FDIC insurance does not nullify the need for an LLR. First, current FDIC pricing schemes are likely to be changed in the near future. Second, an LLR is essential (ultimately) to back up FDIC insurance. Third, the United States has one of the very few government-supported deposit insurance schemes.

Given existing institutional arrangements, monetary systems are vulnerable to sharp increases in the demand for the safest and most readily acceptable form of money, namely currency (or, under a metallic standard, gold). Such sharp increases in demand for currency or gold can bring about a widespread call-in of loans and a dramatic fall (or collapse) of asset prices. Historically, such increases in demand were often associated with runs on banks and a collapse of loans and deposits. Consequently, a role of the LLR is as a backstop or guarantor to prevent a panic-induced collapse of a fractional-reserve banking system. Since such banking systems connect movements in credit (chiefly bank loans and investments) to movements in money, the primary function of the LLR is to prevent *credit* crises from becoming *monetary* crises; that is, to prevent credit/debt contraction from producing monetary contraction.

Thus, while the LLR should prevent systemwide runs on banks, large-scale loan call-ins, and collapses of asset prices, loans, and credit, its ultimate purpose is to prevent collapses of money—to promote monetary stability. The LLR has both the power and the duty to achieve this goal. For, whereas government has little or no reason to intervene in the lending decisions of financial intermediaries, the granting of monopoly powers to a single note issuer carries certain governmental responsibilities with it. Specifically, since certain negative externalities (such as disruptions to real activity, to the payments system, and to financial intermediation) are commonly associated with monetary instability, a governmental role for preventing such negative externalities and consequently providing for monetary stability is implied by the creation of monopoly note issuance.

The monetary stabilization responsibility of the LLR relates to marketwide (macroeconomic) effects and not to individual bank (microeconomic) effects. The LLR function, then, pertains to the responsibility of guaranteeing the liquidity of the entire economy but not necessarily of particular institutions. Moreover, the LLR role is not to prevent all shocks to the financial system, but rather to minimize the secondary repercussions of those shocks. Accordingly, the LLR is charged with averting contagion, spillover, or domino effects which may adversely affect the stability of the entire monetary system. In essence, the purpose of the LLR is to maintain sufficient confidence in the financial system so that there will be no need to provide last-resort liquidity.

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[2] For an excellent discussion of the arguments relating to the existence of LLRs, see White (1981a, 1981b) and Smith (1936). While sympathetic to these arguments, we follow arguments of the Public Choice School and thereby remain skeptical that the objectives of free-money advocates can be realized in the political world in which we live. That is, we doubt that many governments and bureaucracies will be willing to relinquish the power inherent in governmental central banking. See Mundell (1983a, pp. 30–32).

One indirect implication of this liquidity-provision responsibility is worth mentioning. The effective exercise of this liquidity responsibility will prevent a drastic and widespread call-in of loans as well as a dramatic fall (or collapse) of asset prices. Thus, in providing this function, the LLR indirectly ensures that banks needing to sell liquid assets will not have to do so at large losses that might otherwise bring about insolvency and its adverse effects.

These objectives should be fully acknowledged and widely announced to the public before any crisis occurs. Credible assurance of this kind is necessary to reduce the uncertainty about the central bank's willingness to act. This, in turn, promotes confidence and generates stabilizing expectations that help to avert future panics. To minimize so-called "moral-hazard" problems, such an advance announcement should indicate that assistance will not be available to unsound banks but only "to the market."

The LLR function, therefore, is a short-run stabilization function which need not necessarily conflict with longer-run central bank objectives. Such longer-run objectives may differ somewhat under alternative monetary regimes. Accordingly, the precise operational mechanism or tools needed to provide LLR services may differ under alternative regimes.[3]

Lender-of-Last-Resort Services Under Alternative Monetary Regimes

Historically, explanations of the LLR function have developed out of the peculiarities of time and place. Many authors who initially explained the LLR function did so from the perspective of a small open economy often operating under fixed exchange rates; that is, under an international commodity (or gold) standard. These economists had a tendency to generalize from their own knowledge or experience of a particular time and place to situations under which the experience may not be relevant (Mundell 1983b, p. 286). Accordingly, the influence of fixed exchange rates in an open economy clearly dominated many of the early explanations of the LLR.

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[3] For a brief summary of alternative monetary regimes and their implications, see Humphrey and Keleher (1982).

In the case of a small open economy under fixed exchange rates (or a gold standard), for example, the longer-run objective of a domestic central bank is not to directly control the total money supply but rather to maintain (fixed-rate) convertibility of currency into international reserves (or gold). If this convertibility is maintained, the growth of the money supply is tied to the (presumably stable) growth of world international reserves (or gold stock). To maintain the stock of international reserves, the central bank has to ensure that the domestic paper note component of the money supply does not grow so fast as to force an efflux of international reserves through the balance of payments, thereby endangering convertibility. Thus, control over the domestic note component of the money stock is a necessary condition for the long-run maintenance of convertibility. In short, central bank responsibility under this regime involves keeping the domestic credit component of the money stock on a target path consistent with protection of the specie reserve and hence with long-run maintenance of convertibility. Also, under this regime, widespread bank runs and a collapse of the fractional reserve banking system could trigger large internal drains of specie that would threaten to exhaust the gold reserve and endanger convertibility. The function of the LLR under these circumstances, therefore, is to prevent such a collapse and thereby to complement and promote the goal of maintaining convertibility. Thus, the role of the LLR is to prevent credit crises and the associated runs on specie reserves from adversely affecting the longer-run monetary objectives of the central bank.

Crisis situations involving the LLR frequently followed excessive credit expansions. Such credit expansions often were large and prolonged enough to produce outflows of specie and to foster doubts about the ability of commercial banks to redeem their paper in gold. More precisely, when an overexpansion of loans and thereby of bank-created money occurred in a small open economy, an *external* drain of international reserves (or gold) normally followed as a necessary element of the balance-of-payments adjustment mechanism. Under such circumstances, restrictive monetary policy was deemed appropriate to stem the reserve (or gold) outflow and thereby maintain convertibility. However, because some banks typically had been overzealous or imprudent in their lending, the quality of their loan portfolios sharply deteriorated in the adjustment phase of the credit cycle. Depositors and note holders, fearing for the safety of their deposits and notes, withdrew deposits (or requested conversion of deposits and notes into currency or gold) and thereby created an *internal* drain. Appropriate policy action under an internal drain was expansionary in order to accommodate demands for currency, to promote confidence, and thereby to stem the possibility of widespread bank runs, the collapse of the fractional reserve banking system, sharp contractions of the money supply, and the suspension of convertibility.

The policy prescription for simultaneously meeting external and internal drains was to "lend freely at a high (penalty) rate." A high bank rate attracted foreign capital and hence stemmed the external drain. At the same time, a high bank rate rationed the scarce reserves among eager borrowers and ensured that central bank lending was indeed last-resort lending by providing an incentive for banks to exhaust market sources of liquidity before coming to the central bank.[4] Yet, lending freely ensured that credit remained available, so that a sharp fall in bank asset prices would not have to occur (since a market for these assets was provided). This helped to promote confidence in the banking system and thereby prevented secondary runs or contagion. Since the discount rate was the principal and convenient policy tool under a regime of fixed exchange rates, last-resort liquidity was normally provided via the discount window. The provision of such liquidity, therefore, became synonymous with discount-window lending by the "lender" of last resort. In short, the LLR function complemented, rather than conflicted with, the central bank's monetary objectives of maintaining a convertible currency and stable growth of the domestic note issue.

In the cases of a small open economy under flexible exchange rates and a closed economy, direct monetary control becomes a viable target of monetary policy. That is, when the convertibility requirement no longer exists to influence policy, monetary and price-level stability may become a direct objective of central bank policy. Given fractional-reserve banking and governmental monopoly of legal tender issuance, however, economies under both of these regimes still remain vulnerable to bank runs and the collapse of fractional-reserve banking, and thereby to sharp contractions of the money supply. Again, the function of the LLR under these regimes is to prevent credit crises and instability from creating monetary crises and contraction; that is, to prevent banking collapses from affecting the money supply.

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[4] There was an additional rationale for the high bank rate. Specifically, it ensured that the domestic-credit component of the money stock would be kept on a noninflationary path. For when bankers are forced to borrow money from the LLR at a penalty rate, they will be eager to pay off those loans when the panic expires. The resulting loan repayment will extinguish the emergency increase in the money stock, bringing that stock back on path.

Under both the closed-economy and flexible-exchange-rate regimes, the pursuit of monetary stability automatically results in the provision of last-resort liquidity. Achieving monetary stability necessarily means that sharp increases in the demand for coin and currency be accommodated in order to prevent sharp contractions in the money stock. Stability in monetary growth will also tend to minimize the volatility of credit and therefore lessen the likelihood both of sharp collapses in the prices of bank assets and of widespread bank runs. Such policy objectives typically are most conveniently provided through open market operations. Although many economists still do not associate open market purchases with the LLR function, such purchases are a particularly efficient way of providing liquidity to the market. They have the advantage of speed as well as that of regulating the total amount of reserves, but *not* their allocation among particular users.

LLR provision of liquidity during a crisis via open market operations does not conflict with longer-run monetary control. Specifically, prompt and vigorous LLR action will stop any panic within a very short time, long before the supply of high-powered money strays very far off its stable long-run path. Also, to the extent that the emergency expansion of high-powered money merely offsets panic-induced rises in currency and reserve ratios, the money stock will remain largely unchanged. As a result, any deviation of the money supply from its long-run target path will be small both in magnitude and duration. Thus, the LLR function is essentially a very short-run function of a central bank which is only activated during temporary periods of emergency. The stabilization of money and prices is a continuous and longer-run function. Consequently, the functions are not in conflict. Indeed, since the LLR function works to prevent sudden decreases (shocks) of the money stock, it is fully consistent with a "gradualist" approach to monetary control. The monetary control and LLR functions, therefore, are complementary rather than conflicting functions.

In sum, the lender of last resort has the same objective under different regimes: to prevent short-run credit instabilities from affecting longer-run monetary objectives. The short-run LLR function does not conflict with, but rather complements, the longer-run monetary objectives.

Lucid explanations of the above-described central bank LLR function were presented by several early monetary theorists. The concept of the LLR was developed and refined during the course of important monetary debates of the 19th century and often after a monetary crisis. Indeed, as Charles Rist (1966, p. 380) emphasized: "Central banks of issue, and consequently their functions and operations, really developed in the course of the nineteenth century." These earlier monetary writers spelled out the LLR function both more clearly and more consistently than many modern authors. For this reason, a thorough and clear understanding of this function and its important implications can best be obtained by reviewing its historical development, and by recognizing the different monetary regimes under which these important authors developed their interpretations.

Henry Thornton's Early Presentation of the Theory of a Lender of Last Resort

The term "lender of last resort" owes its origin to Sir Francis Baring, who in his *Observations on the Establishment of the Bank of England* (1797) referred to the Bank as "the dernier resort" from which all banks could obtain liquidity in times of crisis. But the concept itself received its first—and in many respects still its most rigorous, complete, and systematic—treatment in the hands of Henry Thornton. It was Thornton who, in his testimony before Parliament, in his speeches on the Bullion Report, and in his classic *An Enquiry Into the Nature and Effects of the Paper Credit of Great Britain* (1802), identified the Bank of England's distinguishing characteristics as an LLR. It was he who also specified the LLR's primary function, who distinguished between the microeconomic versus macroeconomic and shock-preventing versus shock-absorbing aspects of this function, and who analyzed its relationship with the monetary control function of the central bank. Finally, it was he who first enunciated the so-called "moral hazard" problem confronting the LLR.

Thornton identified three distinguishing characteristics of the LLR. First was its unique position as the ultimate source of liquidity for the financial system. The LLR, he pointed out, maintained and created a strategic stock of high-powered money that could be used to satisfy demands for liquidity at critical times. More precisely, it held the central gold reserve from which all banks could draw. Equally important, it supplied the other (non-gold) component of the monetary base in the form of its own notes—notes which, by virtue of their unquestioned soundness and universal acceptability, were considered the equivalent of gold and therefore constituted de facto legal tender. The Bank's effective monopolistic power to issue these notes gave it sole control over an inexhaustible source of domestic legal tender—the first requisite of an LLR.

The second distinguishing characteristic of the LLR identified by Thornton was its special responsibilities as custodian of the central gold reserve. Not only must it hold sufficient reserves to inspire full confidence in their ready availability in times of stress, but it must also rely on its own resources (since as the last resort, it can turn to no other source) to protect the reserve from gold-depleting specie drains. Specifically, it must stand ready to freely issue its own paper to stem the panics that bring about internal specie drains. And, while relying on its control over the issue of monetary notes to prevent external drains caused by persistent inflationary over-issue of paper, it must hold so large a reserve as to be able to withstand those temporary and self-reversing external drains originating in real shocks to the balance of payments. Should the Bank nevertheless find its reserve exhausted and the gold in circulation depleted by an extraordinary succession of such shocks (Thornton mentions three successive crop failures), it must take steps to ensure that the eventual return flow of gold is not delayed by domestic monetary contractions that depress aggregate production and thus reduce output available for export. For, according to Thornton (1939, p. 118), given downward inflexibility of wages and prices in the face of money-induced declines in aggregate demand,

> the manufacturer, on account of the unusual scarcity of money, may even . . . be absolutely compelled by necessity to slacken, if not suspend, his operations. To inflict such a pressure on the mercantile world as necessarily causes an intermission of manufacturing labour, is obviously not the way to increase that exportable produce, by the excess of which, above the imported articles, gold is to be brought into the country.

In short, the central bank must ensure that temporary external drains originating in a succession of transitory real disturbances are not prolonged by secondary monetary shocks. To do this, it must sterilize or neutralize those gold drains with temporary increases in its own note issue. In so doing, it maintains the base of high-powered money and prevents sharp contractions in the money stock, contractions which, by depressing manufacturing activity and thus reducing output available for export, would prolong the deficit in the balance of trade and hinder the return flow of gold. By judicious expansion of its own paper, the Bank of England arrests and reverses these specie drains that imperil its gold reserve.

The third characteristic of the LLR, according to Thornton, was that it was not just like any other bank; it had public responsibilities.

Unlike an ordinary commercial banker, whose responsibilities extend only to his stockholders, an LLR's responsibility, Thornton asserted, extends to the entire economy. Specifically, the LLR's duties include preserving the aggregate quantity and hence purchasing power of the circulating medium during bank runs and panics, and assisting the entire financial system in times of crisis. This responsibility, he argued, dictates that the LLR behave in a way precisely the opposite of that of a commercial banker in times of distress, expanding its note issue and loans at the very time the banker is contracting his. For whereas the individual banker can justify his loan and note contraction on the grounds that it will enhance his own liquidity and safety while not materially worsening that of the whole economy, the LLR can make no such assumption. On the contrary, the LLR must assume that, because of its influence over the total money supply, any contractionary policy on its part would adversely affect the economy. Consequently, the LLR must expand its note issue and loans at a time when the prudent commercial banker is contracting his. To be in a position to do this, the LLR, Thornton noted, must hold much larger cash reserves than the ordinary bank.

Having outlined the distinctive features of the LLR, Thornton next expounded on many issues relating to central banking, but four in particular are especially relevant to the LLR. The first concerns a possible conflict between the central bank's responsibility as controller of that part of the monetary stock which consists of domestic notes and its function as lender of last resort. To the extent that the central bank bears the responsibility for providing a stable framework of the domestic note component of monetary growth, it must exercise a moderate and continued restraint on the rate of expansion of its own note issue. It must exercise such restraint either to protect its international reserves from displacement by excess paper so that it can maintain the convertibility of its currency under fixed exchange rates or to prevent domestic inflation under floating exchange rates. But coping with unusual liquidity strains or panics through exercise of the LLR function calls for abandonment of this restraint and relinquishing control over the rate of expansion of the note component of the monetary base. Hence, some banking specialists have noted an apparent conflict between these two central banking objectives.

Thornton, however, saw no inconsistency between a policy of stable monetary growth and the actions required to deal with liquidity crises. In the following passage, which Joseph Schumpeter has called the "Magna Carta of central banking," Thornton distinguishes between the long-run target growth path of the note component of the monetary base and temporary emergency deviations from the path. The proper policy of the Bank of England, Thornton (1939, p. 259) said, is

> [T]o limit the total amount of paper issued, and to resort for this purpose, whenever the temptation to borrow is strong, to some effectual principle of restriction; in no case, however, materially to diminsh the sum in circulation, but to let it vibrate only within certain limits; to afford a slow and cautious extension of it, as the general trade of the kingdom enlarges itself; to allow of some special, though temporary, increase in the event of any extraordinary alarm or difficulty, as the best means of preventing a great demand at home for guineas;[5] and to lean to the side of diminution, in the case of gold going abroad, and of the general exchanges continuing long unfavourable; this seems to be the true policy of the directors of an institution circumstanced like that of the Bank of England. To suffer either the solicitations of merchants, or the wishes of government, to determine the measure of the bank issues, is unquestionably to adopt a very false principle of conduct.

Thus, to Thornton, the main responsibility of the central bank was to regulate the domestic paper component of the money stock so that it expands at a steady noninflationary pace roughly comparable to the long-term growth rate of output. The bank must also counter those specie drains that periodically threatened to deplete its gold reserve and force suspension of convertibility. As previously mentioned, these drains were of two types: external (or foreign), composed of exports of gold to cover an adverse balance of payments in the country's international accounts and, internal, consisting of panic-induced increases in the quantity of gold held by domestic residents. Temporary (self-reversing) external drains arising from transitory real shocks to the balance of payments can normally be met from the large buffer stock of gold reserves held precisely for that purpose, the temporary runoff of gold being offset by a reverse flow later on. But an extraordinary succession of such drains, if sufficient to exhaust the metallic reserve and deplete the gold in circulation, may require expansionary policy. Such policy, Thornton argued, would neutralize (sterilize) the gold outflow, prevent needless monetary contraction and the resulting disruption of the export industries ("those sources of our returning wealth"), and thereby contribute to the prompt correction of the trade deficit and the speedy return of gold. By contrast, persistent external drains arising from inflationary over-issue of paper call for restrictive policy. Either by reducing inflated British prices relative to foreign prices or by creating an excess demand for money which domestic residents attempt to satisfy by selling more goods and buying less, such restrictive policy spurs exports, checks imports, eliminates the trade-balance deficit, and halts the outflow of gold. Clearly monetary contraction, he thought, is the correct remedy for persistent external drains.

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[5] Thornton is here referring to the public's demand for gold coin, the guinea being the name of a standard gold coin in use in England at the time.

In the case of a panic and internal drain, however, the Bank should be prepared temporarily to expand sharply both its note issue and its loans to satisfy the public's demand for high-powered money. This means that the Bank must step off its path of stable note growth to prevent the money stock from shrinking. Indeed, Thornton argued that emergency expansions of Bank of England notes were required to keep the stock of paper money (Bank notes plus notes issued by commercial banks) on path in the face of panic-induced rises in currency and reserve ratios. There need be no conflict between the functions of monetary control and lender of last resort, however, since the first refers to the long run and the second to temporary periods of emergency that may last for only a few days. Although he had no penalty rate mechanism to extinguish the emergency increase of base money and return it to path once the panic was over, he did argue that if the central bank, in its role as an LLR, responds promptly and vigorously to the threat of a liquidity crisis, the panic will be averted quickly. Indeed, Thornton held that the mere expectation of such a response may be sufficient to stop the panic before additional notes are issued. Thus, the deviation of the money stock from its long-run target path will be small, both in magnitude and duration.

The second issue considered by Thornton concerns the extent of the lender of last resort's responsibility to individual banks as opposed to the banking system as a whole. Suppose these individual banks are unsound. Must the LLR act to prevent their failure; that is, are bailout operations necessary to preserve the stability of the payments mechanism? According to Thornton (1939, p. 188):

> It is by no means intended to imply, that it would become the Bank of England to relieve every distress which the rashness of country banks may bring upon them: the bank, by doing this, might encourage their improvidence. There seems to be a medium at which a public bank should aim in granting aid to inferior establishments, and which it must often find very difficult to be observed. The relief should neither be so prompt and liberal as to exempt those who misconduct their business from all the natural consequences of their fault, nor so scanty and slow as deeply to involve the general interests. These interests, nevertheless, are sure to be pleaded by every distressed person whose affairs are large, however indifferent or even ruinous may be their state.

Thorton made four key points in this passage. First, the lender of last resort's primary responsibility is to the market ("the general interests") and not to the individual bank. The central bank has no duty to sustain particular institutions. Second, the LLR must take account of the moral hazard problem. That is, it must recognize that when it makes liberal accommodation available, it may create incentives that encourage laxity and recklessness in the lending practice of individual banks. Thornton's solution to this problem was to advise against bail-out operations for banks whose distress arises from "rashness," "improvidence," or "misconduct." By subsidizing the risk-bearing function of poorly managed banks, such rescue operations, he asserts, would encourage other banks to take excessive speculative risks without fear of the consequences. In short, individual imprudence should be punished by losses. Only if the financial repercussions of such punishment threaten to become widespread should the lender of last resort intervene. His third point, however, was that even in this latter case, aid should be extended sparingly and on relatively unfavorable terms. Finally, he was skeptical of the claim that economic welfare is inevitably harmed when a bank fails. This argument, he noted, would provide every large bank, no matter how poorly run, with an automatic justification for aid. He was aware that occasionally the public interest may be better served by the demise of inefficient banks, because the resulting improvements in resource allocation may outweigh any adverse spillover side effects of the failure.

The third issue addressed by Thornton was whether the lender of last resort should try to prevent shocks to the financial system. Here Thornton answered in the negative. The lender of last resort exists, he said, not to prevent shocks but to minimize their secondary repercussions. He argued that a panic could be triggered by any kind of "alarm"; for example, rumors of a foreign invasion, an initial bank failure, and so on. The central bank has no responsibility for stopping these triggering events, but it does have a responsibility for arresting the panic, stopping it from spreading throughout the system. "If any one bank fails," said Thornton (1939, p. 180), "a general run on the neighboring ones is apt to take place, which if not checked at the beginning by a pouring into the circulation a large quantity of gold, leads to very extensive mischief."

The proper response, according to Thornton, is not to stop the initial failure, but to pump liquidity into the market. In Thornton's view, the actual occurrence of a widespread panic would be properly attributable not to the initial bank failure, but to the central bank's failure to insulate the economy from the impact of that event. He distinguished between the effect of closing an individual bank and the policy errors of the lender of last resort. Closing an individual bank, he said, contributes very little to "general distress" or "general commercial difficulty." By contrast, policy errors of the lender of last resort create a "general shock to credit" that "produces Distress through the whole Kingdom" (Thornton, pp. 287–88, 304–5).

Finally, Thornton identified the paramount objective or primary purpose of the lender of last resort. Today, opinion varies as to the lender's ultimate objective, with all of the following being mentioned: preventing widespread bank failures; preserving confidence in the banking system; preventing a massive dumping of assets and the consequent collapse of asset values; guarding against the danger of massive currency withdrawals; and ensuring that banks and other lending institutions will be able to meet their loan commitments. Thornton, however, saw the lender of last resort's overriding objective as the prevention of panic-induced declines in the money stock, declines that could produce depressions in the level of economic activity. That is, he viewed the LLR as essentially a monetary rather than a banking function. While recognizing that the LLR also functions to forestall bank runs and avert credit crises, he insisted that these functions, although undeniably important, were nevertheless ancillary and incidental to the LLR's main task of protecting the money supply. In other words, the LLR's crisis-averting and run-arresting duties were simply the means (albeit the most efficient and expeditious ones) through which it pursued its ultimate objective of preserving the quantity, and hence the purchasing power, of the money stock. The important point was to prevent sharp short-run shrinkages in the quantity of money, since hardship ensued from these rather than from bank runs or credit crises per se.

In this connection, he drew a sharp distinction between bank *credit* (loans and discounts) on the one hand and the stock of *money* on the other. He then argued that, while the two aggregates tend to rise and fall together, it is the fall of the money stock that does the damage to the real economy. More precisely, he asserted that, while credit indeed finances and supports business activity, such credit arises from money rather than vice versa. Since credit springs from money and not money from credit, it follows that monetary contractions rather than credit collapses per se are the root cause of lapses in economic activity. Regarding this point, Thornton (1939, p. 307) asserted that a run-induced contraction in bank credit is not as harmful as the corresponding decline in the money stock: "It is not the limitation of Discounts or Loans, but . . . the limitation of Bank Notes or of the Means of Circulation that produces the Mischiefs [of unemployment and lost output]."

To show how such monetary contractions and the resulting fall in output and employment would occur in the absence of an LLR, Thornton traced a chain of causation running from an alarm or rumor to financial panic to the demand for high-powered money to the money stock itself and thence to aggregate spending and the level of real economic activity. Panics, he noted, trigger doubts about the solvency of country banks and the safety of their note and deposit liabilities. As a result, moneyholders seek to convert these assets into money of unquestioned soundness, namely gold or Bank of England notes. These two items, he noted, comprise the base of high-powered money, an unaccommodated increase in the demand for which in a fractional reserve banking system is capable of causing a multiple contraction of the money stock. The demand for base money, he said, is doubly augmented during panics; for at the same time that moneyholders are attempting to convert suspect country bank notes and deposits into gold or its equivalent, country banks are also seeking to augment their reserve holdings of these high-powered monetary assets, not only to meet anticipated cash withdrawals but also to allay public suspicion of financial weakness. The result is a massive rise in the demand for base money—a rise that, if not satisfied by increased issues, produces sharp contractions in the money stock and equally sharp contractions in spending. Since Thornton contended that wages and prices were downwardly sticky and therefore responded sluggishly to declines in spending, it follows, he said, that output and employment will bear most of the burden of adjustment; that is, the monetary contraction will fall most heavily on real activity.

To prevent this sequence of events, the LLR must stand ready to accommodate all panic-induced increases in the demand for high-powered money. This it can readily do since it has a monopoly over its own banknote component of the monetary base. Expressed in modern terminology, Thornton's argument was essentially this: The LLR must be prepared to offset falls in the money multiplier arising from panic-induced rises in the currency and reserve ratios with compensating rises in the monetary base. By so doing, it maintains the quantity of money intact and therefore also the level of economic activity.

Monetary Controversies of the Mid-19th Century and the Concept of a Lender of Last Resort

As Charles Rist (1966, p. 383) indicated: "Henry Thornton's description [of a central bank acting as the fulcrum of the entire

English money market] is the first of its kind in English economic literature." Thornton's seminal contribution to the concept of the LLR was the most thorough discussion of this function to that date. Few refinements to his LLR views were made until the debate initiated by the Bank Charter Act. The period of restriction ended in 1821 as Britain returned to a metallic standard. During the next half century, a good deal was learned about the operation of a central bank. And it was during this period that Bank of England notes became de jure in addition to being de facto legal tender.[6] By this time, the Bank of England had also become the central reserve of gold for the English banking system. That is, the Bank became the central reserve against notes as well as the central reserve against deposits (Smith 1936, pp. 15–16, 122–23).

In general, important contributions to the LLR concept were formulated after financial crises. (Indeed, Thornton was importantly influenced by the financial crises of 1793 and 1797.) Similarly, the several monetary crises in the 1821–44 period stimulated important debate and discussion related to this function. A much-discussed concern of this period, for example, was how to keep periodic severe drains of gold from causing drastic shrinkages in the note issue (Daugherty 1942, p. 141). Since England was an open economy under fixed exchange rates during the period, the objectives of the Bank of England were to maintain convertibility of the currency in the long run and to prevent credit crises from causing monetary contraction in the short run. Almost all monetary writers of the period fully endorsed this long-run objective. The only notable exception was the Birmingham School (the Attwood brothers and their disciples) and a few other proponents of inconvertible paper standards. The controversies of the period, therefore, centered around the short-run policies pursued by the Bank of England and their relation to the crises that periodically affected England. Such discussions often directly pertained to the LLR.

Developments Leading Up to the Bank Act of 1844

Three important financial crises occurred between 1821 (the year Britain returned to a metallic standard) and 1844 (the year the Bank Act was passed): the crises of 1825, 1836, and 1839. Much discussion and controversy among monetary writers of the day focused on the proper role of the Bank of England during these crises. Several writers associated with both the Currency School and the Banking

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[6] In 1833, Bank of England notes officially became legal tender. See, for example, Hawtrey (1962, p.131) and Vera Smith (1936, p.14).

School participated in this discussion. Their differing policy proposals often had important implications for the LLR function, and it is these aspects of the period's discussion that are emphasized here.

While Henry Thornton clearly recognized and delineated the special LLR responsibilities of the Bank of England, several important monetary writers of the mid-19th century did not support his views.[7] Several writers believed the Bank of England was "just like any other bank" and, consequently, should be managed no differently than any other bank.[8] One important implication of this view was that the Bank of England had no special LLR responsibilities. Levels of reserves maintained at the Bank of England did not need to be higher than those of other banks and, like other banks, the Bank should curtail lending in times of crisis (Wood 1939, p. 156). According to this view, a curtailment of lending was appropriate for any type of drain, external or internal. Supporters of this view apparently did not recognize the responsibilities inherent in a government monopoly of legal tender issuance (Hawtrey 1962, p. 131).

These views were supported by the Currency School writers, who focused on maintaining convertibility and preventing periodic severe short-run financial crises such as those experienced during this period. In their view, such crises arose because of the note-expansion policies of the Bank of England and the commercial banks. According to these writers, convertibility was not sufficient in and of itself to prevent such short-term financial crises. Even under convertibility, for example, the Bank of England and country banks could issue notes to excess (Viner 1965, p. 235). Far from gently contracting the volume of notes immediately upon the first loss of gold, banks often continued to issue notes even as gold was flowing out, delaying contraction until the last moment when reserves were nearly depleted. This contributed to violent monetary contractions that affected the entire economy and sometimes precipitated a convertibility-threatening financial crisis. In short, according to the Currency School, convertibility alone was not a sufficient safeguard of monetary stability.

To prevent these drastic monetary contractions and to assure continued convertibility, some additional mechanism was needed—specifically, control over the note issue. The proposed control mechanism took the form of a nondiscretionary rule which rigidly connected note issuance with gold movements and gave the Bank of England a monopoly over note issue. Currency School writers believed that a mixed currency of paper and coin was properly regulated if it were made to behave exactly as gold coin; that is, automatically expanding and contracting pound for pound with inflows and outflows of gold.[9] This was equivalent to a 100 percent gold reserve backing for bank notes. Currency School writers believed that if the Bank of England consistently followed such a rule, overissuance of notes would be prevented and, consequently, the violent financial crises and real disturbances described above would be eliminated.[10] There would be no need for discretion, since no serious economic disturbance or financial crises would occur. In other words, Currency School writers believed that there would be no need for the Bank to exercise discretion once a rule requiring notes to vary one for one with gold was in place (Fetter 1965, p. 176). Under such a rule, all drains were to be treated alike, just as they would be by any private bank, and restriction would be the rule in all cases of a loss of reserves by the Bank of England. Since no discretion was necessary, the Bank could disregard the causes of a drain. After all, to distinguish between causes of a drain would give too much discretion to the Bank's directors.

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[7] By the mid-1800s, Thornton's writings were largely forgotten, having long since fallen into oblivion. His subtle analysis had been eclipsed by the more simplistic doctrines of Ricardo. Perhaps this is the main reason why his ideas received so little support. Even the Banking School writers who enumerated ideas very similar to his had largely forgotten him. He was rediscovered and rescued from total obscurity only in the 20th century, by J. Viner, J. Hollander, J. Angell, and F. V. Hayek.

[8] Sir Robert Peel, for example, endorsed this view. See Sayers (1957, p. 9).

With respect to its banking (deposit taking and lending) versus its issuing function, the Bank of England should also act just like any other bank, according to Currency School writers. This view, for example, was voiced by Frank Fetter (1965, p. 258):

> They [Currency School writers] had, in their insistence on the rigid regulation of note issues, either specifically or implicitly taken the view that the Bank, in its banking operations, should act just like any other bank. The logical corollary of this was that the Bank had no responsibility in time of crisis greater than the ordinary bank had to its customers and the community, that it had no need to keep a larger reserve in its Banking Department than any other bank, and that it should strive to maximize profits in the same way as other banks.

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[9] See, for example, Daugherty (1942, p. 143), where the author indicates that Currency School writers believed that "Currency reform must be in the direction of making the existing mixed currency closer to that of a pure metallic currency. The mixed currency ought to vary quantitatively as a pure metallic currency."

[10] Currency School writers were not exclusively concerned with *financial crises*. They also were concerned with avoiding *business cycles* caused by monetary overexpansion and contractions. This point is forcefully made by Ludwig von Mises, who gave the Currency School credit for being the precursor and originator of the Austrian monetary overinvestment theory of the business cycle.

This Currency School view left little or no role for a lender of last resort to avert liquidity panics and domestic cash drains. Since no discretion was allowed, Bank action was often supposed to parallel the behavior of "any other bank," and all drains were to be treated alike with restrictive action, the Bank of England would not act as a lender of last resort. According to writers of the Currency School, their policy proposals eliminated the fundamental causes of financial panics, thereby making the lender of last resort unnecessary.

The Bank Charter Act of 1844

The Bank Charter Act of 1844 largely embodied the prescriptions of the Currency School writers:

1. The Bank of England was divided into two departments: an issue department (to issue notes in exchange for gold and to pay out gold on demand for notes) and a banking department (to receive deposits and make loans).

2. The Act limited the issue department to a maximum issue of notes uncovered by gold of £14,000,000. Issues above this amount had to be 100 percent covered by gold; that is, notes above this amount would be issued only in exchange for gold (Viner 1965, p. 220; Withers 1909, p. 204). This in effect implied that "the bank would be unable to meet the claims of its depositors with its own notes or with specie once the reserves of the banking department had been exhausted" (Viner 1965, p. 229). Thus, it prevented the banking department from being able to use funds available in the issue department during a crisis (Fetter 1965, p. 209). This aspect of the Act constrained the Bank of England by severely limiting its ability to expand the note issue in time of crisis; that is, *it effectively removed important lender-of-last-resort powers.*

3. The Act placed Bank of England notes under a strict regulation which in essence made the Bank of England obliged to deal with internal and external drains in the same way.[11]

4. The Act eliminated competitive note issuance by giving the Bank of England a monopoly of note issue.[12]

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[11] See, for example, Elmer Wood (1939, p. 154), where he asserts that "as a result of the Act of 1844 the Bank felt obliged to restrict credit drastically even though the exchange was favorable during the October panic [of 1847]."

[12] See Vera Smith (1936, p. 18), where she remarks that "It was the 1844 Act which ensured the ultimate monopoly of the note issue in the hands of the Bank of England."

Thus, the Bank Charter Act of 1844 essentially removed important LLR powers from the Bank of England and forced the Bank to respond to both internal and external drains with restrictive policies. This Act induced the Bank of England to act as if it had no important "public" responsibilities in dealing with panics and crises (Fetter 1965, p. 204). Indeed, as Smith (1936, p. 125) pointed out, one of the cardinal principles of the 1844 Act was considered to be that:

> The Bank of England should be released from any obligation to pay attention to the public interest in framing its policy and should be at liberty to act for the benefit of its shareholders, the principles of management by the Banking Department being the same as those regulating any other large deposit bank.

Events After 1844

The Bank Charter Act did not eliminate financial crises as the Currency School writers believed it would. In the years after 1844, the reform measures embodied in the Act were put to severe tests by three turbulent financial crises in 1847, 1857, and 1866. All of these financial crises were characterized by sharp internal drains or panics. As indicated above, however, the Bank Act prevented the Bank from acting as an LLR. In all of these crises, the government found it necessary to temporarily suspend the Bank Act. Thus, these crises showed the government always ready, on the only occasions when it was necessary, to exempt the Bank from the provisions of the Bank Act (Smith 1936, p. 18), allowing it to issue notes uncovered by gold in excess of the statutory limits imposed in the Bank Charter Act.[13] Such note expansion was considered necessary to stem the internal drain or panic. In short, the government rescinded the restriction and thereby enabled the Bank to serve as an LLR. In all three cases, either the mere suspension of the Act (as in 1847) or the expanded note issue was sufficient to stop the internal drain; that is, the provision of LLR services halted the panics.

These crises and the need for special government action to deal with them forced a reconsideration of certain provisions of the Bank Act. In particular, a deficiency of the Act appeared to be its prohibition of last-resort lending. Several Parliamentary committees recommended the incorporation of a "relaxing clause" (or an "elastic clause") into the Act. Such a clause would enable the Bank to temporarily provide LLR services in the special case of an internal drain or panic.

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[13] In 1847 there was no actual infringement of these limits. See Daugherty (1943, p. 242).

A "relaxation clause" had been opposed by Currency School writers on the grounds that it would lead the public to believe that an increase in note issues would easily and promptly occur should any perceived problems arise. They also thought there was a danger that the clause would be used too soon and too often, thereby becoming the rule rather than the exception. Consequently, incentives would be created for banks to forego adopting necessary correctives and instead take more risks; that is, a moral hazard problem would arise. Banks, for example, would have an incentive to hold smaller reserves and liquid assets, thereby increasing the likelihood of financial crises (Mints 1945, p. 119). Currency School writers also believed that if the public anticipated relaxation, foreign drains would not be stopped. Finally, such a clause would allow discretion and, in addition, introduce a departure from the principles of metallic currency (Daugherty 1943, p. 243).

The Banking School

Banking School writers (such as Tooke, Fullarton, Wilson, and Gilbart) disagreed with Currency School writers on many of these issues and, indeed, opposed the Bank Act of 1844. The principal writers of the Banking School did not begin to attack Currency School theories until shortly before the Bank Charter Act was passed (Daugherty 1942, p. 148). Events after 1844, however, provided support for their views of the LLR function.

In opposing the views of the Currency School, Banking School writers insisted that the Bank of England should not behave "just like any other bank."[14] They believed that a special role existed for the Bank of England and that in the case of an internal drain, any individual commercial bank's attempt to expand would result in an immediate loss of reserves without significantly changing the overall situation. An individual bank, therefore, would be induced to contract rather than expand its operation (Smith 1936, p. 66). In the case of an internal drain, Banking School writers argued, it was essential for some nonprofit-seeking holder (or creator) of the ultimate reserve of the system to pursue an expansionary policy (Mints 1945, p. 248). No other institution would be able to inspire the same degree of confidence or have its notes accepted as readily. The bank which holds (or creates) the ultimate reserve has the ability to lend in a crisis and thereby has the great advantage over other institutions, which run the risk of stopping payment if their reserves are exhausted (Hawtrey 1962, p. 131). In short, Banking School writers contended that, unlike other banks, a loss of reserves should not normally result in a restriction of the issue of Bank of England notes. In their view, the Bank of England should expand its note issuance during an internal drain or panic and be a lender of last resort. By providing these services, the bank would stem the panic and might prevent the suspension of convertibility as well.

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[14] See, for example, Thomas Tooke, who stated: "A great mistake was committed by the framers of the Act of 1844, in the assumption that the Banking Department of the Bank of England admits of being conducted in the same way, and with the same effects on the interest and convenience of the Public, as any other non-issuing Joint Stock Bank," *On the Bank Charter Act of 1844* (London, 1856), p. 142, reprinted in Fetter (1965, p. 261).

In carrying out such LLR responsibilities, there were other ways in which the Bank of England should not behave "just like any other bank." Banking School writers insisted that the Bank of England should hold larger reserves than other banks (Fetter 1965, p. 261), which would promote confidence in the Bank's ability to manage various types of drains. Larger reserves would also permit the Bank to easily manage temporary external drains without disrupting domestic circulation by serving as an "exchange defense fund" (Wood 1939, p. 155). Since Banking School writers (such as Tooke and Fullarton) believed that most foreign gold flows were caused by temporary factors, a large reserve would enable the Bank to deal with frequent temporary external drains and not affect the domestic economy (Daugherty 1942, p. 154; Mints 1945, p. 120). Finally, larger reserves would also give the Bank more ability to use discretion in its treatment of various gold drains.

Banking School writers opposed the Bank Act of 1844 for several reasons. In their view, one of its defects was that it failed to allow for different policy prescriptions in the case of alternative types of drains; the Act obliged the Bank to deal with all drains in the same way—with restrictive policies.[15] Banking School writers endorsed a definite LLR role for the Bank of England, maintaining that three distinct types of drains existed and discretion was necessary so that the Bank of England could distinguish among them before applying a proper policy remedy for each. A mechanistic rule was inappropriate because of the different causes and types of these drains. Instead, proper policy prescriptions included expansion for an internal drain, contraction for a permanent external drain, and the use of its large reserve stock to manage a temporary (self-correcting) external drain. In short, according to Banking School writers (and contrary to Currency School writers), contractionary policy was inappropriate in both the cases of an internal drain and a temporary external drain.[16] The view that the various types of drains should not be dealt with in the same manner, of course, was not new. Henry Thornton had stated that the Bank should deal differently with the alternative types of drains (Wood 1939, p. 154).

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[15] Indeed, John Stuart Mill supported the Banking School writers on this issue. He indicated that "the [Bank] Act hindered the Bank from taking the steps which would give relief when a crisis had occurred." See Viner (1965, p. 234).

As mentioned above, the Currency School's support of the Bank Act was based on the view that convertibility was not, in and of itself, sufficient to prevent financial crises. Some additional mechanism was necessary to control the note component of the domestic monetary base, and the Bank Act's nondiscretionary rule was supposed to provide that control. Banking School writers believed that in the case of the small open economy, convertibility, together with bank lending against real bills, would suffice to provide control of the domestic note component of the monetary base and thereby prevent financial crises. Modern scholars have recently demonstrated that under a convertible currency, the real bills criterion would indeed function to control the paper component of the money stock.[17]

The events after 1844 tended to support Banking School views on the role of the Bank of England as an LLR during an internal drain. Financial crises had encouraged various monetary writers to delineate their views on the proper role of Bank of England, and the crisis of 1866 stimulated one particularly well known monetary writer. He subsequently put the capstone on the 19th-century debate concerning the domestic LLR. His name was Walter Bagehot.

The Contribution of Walter Bagehot

The post-1844 case for the lender of last resort received its strongest and most influential exposition in the writings of Walter Bagehot.

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[16] As Viner has indicated, J. S. Mill also made "distinctions between internal drains, external drains which were self-corrective in character, and external drains which could be checked only by a change in relative price levels, and criticized the Act of 1844 on the grounds that it forced the Bank to apply identical treatment to all three types of drains. [Mill] claimed that a mechanical rule for the regulation of note issue was objectionable because it would prevent different treatment of the different types of drains." See Viner (1965, p. 262).

[17] See, for example, Thomas M. Humphrey (1982) and David Laidler (1983). These authors, for example, point out that the Banking School relied on convertibility to fix the price level of the small open economy and on the real bills criterion to tie the growth rate of the paper component of the money stock to the growth rate of real output. They also argue that when convertibility is absent (so that nothing exists to anchor the price level), the real bills criterion by itself offers no constraint or limitation to the price level or the quantity of money in existence. Hence the traditional Mints/monetarist criticism is correct in an *inconvertible* paper currency regime but is not valid if convertibility reigns.

In his seminal 1873 volume, *Lombard Street,* Bagehot at once clarified, refined, and advanced many of the pro-LLR propositions underlying the position of the Banking School. In so doing, he revived and restated many of the points made earlier by Thornton. Following Thornton, he emphasized the Bank of England's special position as the holder of the ultimate reserve. This position, he noted, not only rendered the central bank different from ordinary commercial banks, but also gave it the power as well as the duty to lend freely in a crisis, the very time when other bankers would be contracting their loans. He also followed Thornton in advocating that the Bank of England hold large buffer stocks of gold reserves, from which periodic drains could be met without adversely affecting the quantity of money in circulation. Finally, like Thornton, he distinguished between the appropriate response to internal versus external cash drains. An internal drain, he said, should be countered by a policy of lending freely and vigorously to erase all doubt about the availability of bank accommodation. An external drain, however, should be met by a sharp rise in the central bank's lending rate, the high interest rate serving to attract foreign gold and encouraging the retention of domestic gold. This latter action, Bagehot thought, was necessary to protect the nation's gold reserve, the gold component of the monetary base. According to Bagehot (1962, p. 155), "the first duty of the Bank of England was to protect the ultimate cash of the country, and to raise the rate of interest so as to protect it."

A sufficient gold reserve, of course, was necessary both for the preservation of the gold standard and for the maintenance of public confidence in the convertibility of paper currency into gold. Regarding public confidence, Bagehot (1962, pp. 156–57) argued that "a panic is sure to be caused" if the gold reserve falls below "a certain minimum which I will call the 'apprehension minimum.' " It follows that the lender of last resort should strive to keep its gold reserves above this critical threshold.

Bagehot (1962, pp. 27–28) thought that a persistent external drain would trigger an internal drain as the public, observing the diminution of the gold stock and fearing a prospective suspension of cash payments, would seek to convert deposits and country bank notes into gold. "Unless you can stop the foreign export," he said, "you cannot allay the domestic alarm." In this case, in which "periods of internal panic and external demand for bullion commonly occur together," the lender of the last resort must "treat two opposite maladies at once—one requiring stringent remedies, and especially a rapid rise in the rate of interest; and the other, an alleviative treatment with large and ready loans." Therefore, "the best remedy . . .

when a foreign drain is added to a domestic drain" is the provision of "very large loans at very high rates." Here is the origin of the famous Bagehot Rule: "lend freely at a high rate."

Like Thornton, Bagehot stressed that last-resort lending should not be a continuous practice but rather a temporary emergency measure applicable only in times of banking panics. And, in perfect accord with his predecessor, Bagehot argued that if the central bank responded promptly and vigorously, the panic would be ended in a few days, by implication an interval not long enough for the domestic note component of the money stock to depart significantly from its appropriate long-run growth track.

Bagehot also viewed the role of the leader of last resort as primarily macroeconomic. The central bank, he said, bears the responsibility of guaranteeing the liquidity of the whole economy but not that of particular institutions. Thus, he prescribed last-resort lending as a remedy solely for emergencies affecting the entire banking system, not for isolated emergency situations affecting an individual bank or a few specific banks. Nor did he intend it to be used to prevent very large or key banks from failing as a consequence of poor management and inefficiency. As shown below, he did not think that support of such distressed key banks was necessary to forestall panics. Like Thornton, he emphasized that the task of the central bank was not to prevent initial failures but rather to prevent a subsequent wave of failures spreading through the system.

Bagehot also followed Thornton in arguing that the lender of last resort exists not to prevent shocks but to minimize the secondary repercussions following them. His views on this point are contained in his analysis of panics, which, said Bagehot (1962, p. 61), can be triggered by a variety of exogenous events—"a bad harvest, an apprehension of foreign invasions, a sudden failure of a great firm which everybody trusted." But "no cause is more capable of producing a panic, perhaps none is so capable, as the failure of a first-rate joint stock bank in London"(Bagehot 1962, p. 29). The shock of this initial failure must be contained before it gets out of hand, for "in wild periods of alarm, one failure makes many." The problem is how to "arrest the primary failure" that causes "the derivative failures." Bagehot's solution, quoted below (1962, p. 25), stresses the liberal provisions of liquidity to the whole system rather than loans to the distressed bank:

> A panic, in a word, is a species of neuralgia, and according to the rules of science you must not starve it. The holders of the cash reserve must be ready not only to keep it for their own liabilities, but to advance it most freely for the liabilities of others. They must

> lend to merchants, to minor bankers, to 'this man and that man,' whenever the security is good. . . . The way in which the panic of 1825 was stopped by advancing money has been described in so broad and graphic a way that the passage has become classical. 'We lent it,' said Mr. Harmon, on behalf of the Bank of England, 'by every possible means and in modes we had never adopted before; we took in stock on security, we purchased Exchequer bills, we made advances on Exchequer bills, we not only discounted outright but we made advances on the deposit of bills of exchange to an immense amount, in short, by every possible means consistent with the safety of the bank, and we were not on some occasions over-nice. Seeing the dreadful state in which the public were, we rendered every assistance in our power.' After a day or two of this treatment, the entire panic subsided, and the 'City' was quite calm.

Conspicuously absent is any mention of the need to channel aid to specific institutions, as would be implied by bail-out operations. Bagehot's emphasis is clearly on aid to the market rather than to the initially distressed bank. He obviously did not think it necessary to prevent the initial failure at all costs.

Up to this point, Bagehot has been depicted largely as a follower or disciple of Thornton. But Bagehot did more than just elaborate, refine, and coordinate Thornton's analysis. He also contributed several original points that added substance to the lender-of-last-resort doctrine and advanced it beyond Thornton's formulation. At least five of these points deserve mention.

First, Bagehot distinguished between the central bank's extending support to the market after a crisis began, and its giving assurance of support in advance of an impending crisis. He argued that the lender of last resort's duty did not stop with the actual provision of liquidity in times of crisis, but also involved making it clear in advance that it would lend freely in all future crises. As Bagehot (1962, p. 85) put it, "the public have a right to know whether [the central bank]—the holders of our ultimate bank reserve—acknowledge this duty, and are ready to perform it." This assurance alone, he thought, would dispel uncertainty about and promote confidence in the central bank's willingness to act; thus generating a pattern of stabilizing expectations that would help avert future panics.

Second, he advocated that last-resort accommodation be made at a penalty rate. Borrowers should have relief in times of crises, but they should be prepared to pay a price that implied a stiff penalty. The central bank has a duty to lend, but it should extract a high price for its loans, a price that would ration scarce liquidity to its highest-valued uses just as a high price rations any scarce commodity in a free market. Moreover, a penalty rate also had the appeal of distributional equity, it being only fair that borrowers should pay handsomely for the protection and security afforded by the lender of last resort. Allocative efficiency and distributive justice aside, the penalty rate, Bagehot claimed, would produce at least four additional beneficial results. First, it would encourage the importation and prevent the exportation of specie, thus protecting the nation's gold reserve. It would achieve this result by attracting short-term capital from abroad and by exerting a deflationary influence on the level of economic activity and domestic prices, thereby improving the external balance of trade by spurring exports and reducing imports. Second, consistent with the objective of maintaining stable growth of the note component of the money stock, a penalty rate would ensure the quick retirement of emergency expansions of the note issue once the emergency ends. The very unprofitability of borrowing at the above-market rate would encourage the prompt repayment of loans when the panic subsides, and the resulting loan repayment would extinguish the emergency issue so that the money stock would return to its noninflationary path. Third, the high rate of interest would reduce the quantity of precautionary cash balances that overcautious wealth-holders would want to hold. Without the high rate to deter them, these cashholders might deplete the central gold reserve. As Bagehot put it, the penalty rate would serve as "a heavy fine on unreasonable timidity," prompting potential cashholders to economize on the nation's scarce gold reserve. In this connection, he advocated that the penalty rate be established "early in the panic, so that the fine may be paid early; that no one may borrow out of idle precaution without paying well for it; that the Banking reserve may be protected as far as possible" (Bagehot 1962, p. 97).

Last and most important, the penalty rate would, in addition to rationing the scarce gold reserve, provide an incentive for banks to exhaust all market sources of liquidity and even develop new sources before coming to the central bank. By encouraging individual banks to develop better techniques of money management and the capital market to develop new channels to mobilize existing liquidity, the penalty rate would promote allocative efficiency in the financial system. In short, the penalty rate would protect the gold reserve, minimize deviations of the growth of the domestic note component from its stable path, allocate resources by market price, discourage reliance on the central bank, and ensure that recourse to the latter's lending facilities was truly a last resort.

Bagehot's analysis, it should be noted, implies still another use for the penalty rate: providing a test of the soundness of distressed borrowers. A penalty rate set a couple of percentage points above the market rate on alternative sources of funds would encourage illiquid banks to turn to the market first. Success in obtaining accommodation at the market rate would indicate that lenders judge these borrowers to be sound risks, for the borrowers and their assets would pass the market test. On the other hand, resort to the central bank would tend to indicate weaknesses in the borrowing institutions, suggesting that the banks may be unable to borrow in the market at the lower rate. Fearing default, lenders may demand a risk premium in excess of the difference between the market rate and the penalty rate, forcing the banks to close, to arrange a merger with other banks, or to resort to the central bank's lending facility. Thus, the penalty rate will have provided a test of the banks' soundness.

Bagehot's third contribution was his specification of the types of borrowers the lender of last resort should accommodate, the kinds of assets it should lend on, and the criteria it should use to determine the acceptability of those assets. Regarding the types of borrowers, he stated that the Bank of England should be willing to accommodate anyone with good security. Last-resort loans, said Bagehot (1962, p. 25), should be available "to merchants, to minor bankers, to this man and that man." The objective of the central bank in time of panic is to satisfy the market's demand for liquidity. It makes little difference, he said, whether this objective is accomplished via loans to merchants, to bankers, or to whomever.

Concerning the type of collateral on which the central bank should lend, Bagehot's answer was clear. The bank should stand ready to lend on any and all sound assets, or, as he put it, "on every kind of current security, or every sort on which money is ordinarily and usually lent" (Bagehot 1962, p. 97). Besides the conventionally eligible bills and government securities, acceptable collateral should include "all good banking securities," and perhaps even "railway debenture stock" (pp. 97, 101). In another passage he makes the point that the "*amount* of the advance is the main consideration . . . not the nature of the security on which the advance is made, always assuming the security to be good" (p. 101). The basic criterion was that the paper be indisputably good in *ordinary or normal times.* The latter qualification is important. It implies that the lender of last resort should not be afraid to extend loans on normally sound assets whose current market value is temporarily below book value owing to depression in the securities market.

To summarize, Bagehot felt that few restrictions should be placed on the types of assets on which the central bank might lend, or the kinds of borrowers it might accommodate. This position was consistent with his advocacy of price as opposed to non-price rationing mechanisms. He recommended that the central bank eschew qualitative restraints—eligibility rules, moral suasion, administrative discretion and the like—and instead rely on the penalty rate to ration borrowing.

Fourth, Bagehot provided a precise delineation of the extent of the lender of last resort's responsibility to individual banks as distinguished from the banking system as a whole. Concerning the question of whether this responsibility included assistance to insolvent banks, Bagehot's answer was an unequivocal no. The central bank's duty, he said, is not to rescue "the 'unsound' people" who constitute "a feeble minority." Such businesses, he said, "are afraid even to look frightened for fear their unsoundness may be detected" (Bagehot 1962, p. 97). In short, the job of the central bank is not to prevent failure at all costs but rather to confine the impact of such failure to the unsound institutions alone.

Bagehot meant for his strictures to apply even to those key banks whose failure, in the absence of central bank action, could shatter public confidence and start a falling-dominoes sequence of financial collapse. Thus, Bagehot (1962, p. 129) acknowledged that if

> owing to the defects in its government, one even of the greater London joint stock banks failed, there would be an instant suspicion of the whole system. One *terra incognita* being seen to be faulty, every other *terra incognita* would be suspected. If the real government of these banks had for years been known, and if the subsisting banks had been known not to be ruled by the bad mode of government which had ruined the bank that had fallen, then the ruin of that bank would not be hurtful. The other banks would be seen to be exempt from the cause which had destroyed it. But at present the ruin of one of these great banks would greatly impair the credit of all. Scarcely any one knows the precise government of any one; in no case has that government been described on authority; and the fall of one by grave misgovernment would be taken to show that the others might easily be misgoverned also. And a tardy disclosure even of an admirable constitution would not much help the surviving banks: as it was extracted by necessity, it would be received with suspicion. A skeptical world would say 'of couse they say they are all perfect now; it would not do for them to say anything else.'

Even in this case, however, Bagehot did not think it appropriate for the central bank to extend aid to poorly managed key banks. It is, instead, "the 'sound' people, the people who have good security to offer" who constitute "the majority to be protected." The lender-of-last-resort function should not be interpreted to mean that unsound banks should not be permitted to fail, but it implies that failure should not be allowed to spread to sound institutions. To Bagehot, the distinction is crucial. In his words, "no advances indeed need be made" on assets on "which the [central] Bank will ultimately lose." Again, in another passage, he offers assurance that if the lender of last resort "should refuse bad bills or bad securities" it "will not make the panic really worse." To arrest a panic, he says, it is sufficient that the bank guarantee to provide liquidity to the "solvent merchants and bankers" who comprise the "great majority" of the market. This policy ensures that "the alarm of the solvent merchants and bankers will be stayed" (Bagehot 1962, p. 97).

Finally, Bagehot warned against undue reliance on the lender of last resort and stressed the need to strengthen individual banks. The lender of last resort, he pointed out, was not meant to be a substitute for prudent bank practices. Consistent with his laissez-faire, free-market philosophy, he argued that the basic strength of the banking system should rest not on the availability of last-resort accommodation but rather on the resources and soundness of the individual banks. According to Bagehot (1962, p. 36):

> [W]e should look at the rest of our banking system, and try to reduce the demands on the Bank [of England] as much as we can. The central machinery being inevitably frail, we should carefully and as much as possible diminish the strain upon it.

Bagehot (1962, p. 60) described in glowing terms the self-reliant character of a hypothetical decentralized "natural system of banking," composed "of many banks keeping their own cash reserve, with the penalty of failure before them if they neglect it." Elsewhere he pointed out that "under a good system of banking . . . a large number of banks, each feeling that their credit was at stake in keeping a good reserve, probably would keep one; if any one did not, it would be criticized constantly, and would soon lose its standing, and in the end disappear" (Bagehot 1962, p. 52). In relying on its own soundness rather than the resources of the central bank, such a system, he noted, "reduces to a minimum the risk that is caused by the deposit. If the national money can safely be deposited in banks in any way, this is the way to make it safe" (p. 53).

One final observation should be made concerning Bagehot's views on the central bank's most appropriate instrument to combat panics. Today many banking experts regard open market operations, rather than discount window accommodation, as the most effective way to deal with systemic liquidity crises. Bagehot undoubtedly would have agreed. Although he consistently prescribed loans, rather than open market purchases of assets, to stop panics, this was only because the latter weapon was not widely used in his day. Had the technique of open market operations been highly developed at that time, he undoubtedly would have approved of its use, at least in those cases where there was no danger of the gold stock being depleted by a foreign drain. On these occasions, Bagehot favored resorting to the most expeditious means of stopping an internal cash drain. Open market operations are quite consistent with his dictum "that in time of panic" the central bank "must advance freely and vigorously to the public . . . on all good banking securities" (Bagehot 1962, pp. 96–97). Moreover, open market operations would have appealed to his preference for market-oriented allocation mechanisms. He would have approved of this particular policy instrument, which regulates the total amount of money but not its allocation among users or uses.

Summary of the Domestic Lender of Last Resort

The essentials of the domestic LLR concept found in the 19th-century writings of Thornton, the Banking School, and Bagehot can be summarized in the following propositions:

1. *The LLR's emergence depends critically on fractional reserve banking and central bank monopoly over legal tender issuance.* The first condition (which renders unaccommodated emergency increases in the demand for high-powered money capable of causing multiple contractions in the money stock) provides a need for an LLR; the second (which gives the LLR sole power to create high-powered money) provides the means of satisfying that need.

2. *The LLR is essentially a monetary rather than a banking or credit function.* The LLR exists to prevent panic-induced contractions in the money stock, contractions that would adversely affect the level of real economic activity. True, the LLR also functions to forestall bank runs and prevent credit shocks from becoming widespread. But these functions, although undeniably important, are nevertheless ancillary to the LLR's main task of maintaining the aggregate quantity of money unchanged in the face of a panic.

3. *The LLR function applies to all monetary regimes.* Moreover, in accomplishing its mission, the LLR supports other central banking objectives under alternative regimes. Under a metallic (gold standard) regime, the LLR helps protect the gold reserve and thus contributes to the maintenance of convertibility by stopping panics that trigger reserve-depleting internal specie drains, by raising the discount (penalty) rate to attract gold from

abroad, and by accommodating emergency demands for high-powered money with its own note issue, thereby rendering gold unnecessary for that purpose. Likewise, under an inconvertible paper currency regime, the LLR helps stabilize the value (purchasing power) of the monetary unit by preventing catastrophic collapses of the money stock.

4. *The LLR function in no way conflicts with the monetary control function of the central bank.* The latter function consists of maintaining long-run stable growth of the domestic note component of the money supply (that is, the component comprising the entire money stock under inconvertible paper regimes but only the noninternational reserve component under metallic regimes). By contrast, the LLR function refers merely to temporary and relatively minor deviations from that stable note growth path. These deviations should be small both in magnitude and duration since the LLR issues base money only to offset panic-induced rises in currency and reserve ratios leaving the money stock largely unchanged. Also decisive LLR action (and the public's expectations of the same) will stop panics within a matter of days, before the note issue gets much off track. In any event, the deviations will be self-correcting as the LLR's penalty rate, by encouraging prompt repayment of last-resort loans, ensures the quick retirement of the emergency issue, thus bringing the note component back on path. By preventing monetary instability associated with panics and crises, the LLR actually complements the monetary control function and is also consistent with the notion of gradualism (that is, the avoidance of sharp monetary shocks to real activity).

5. *The LLR has a macroeconomic rather than a microeconomic responsibility.* Its duty is to the entire economy and not to individual banks. In particular, its duty consists of making funds available to the market during actual panics and publicly acknowledging in advance its commitment to do so in all future panics. In so doing, it reduces public uncertainty and generates stabilizing expectations, both of which enhance its effectiveness. In no case, however, has it a duty to sustain unsound banks. Its watchwords should be "no public absorption of private losses due to faulty management," "no subsidization of risks," and "no bailouts of unwise, erroneous loan decisions." Poorly managed banks should be allowed to fail, with the LLR acting only to ensure that such failure does not adversely affect

the money stock. Besides reducing the moral hazard problem, this prescription is fully consistent with the notion that the LLR exists not to prevent the occurrence of shocks, but rather to minimize the spillover or contagion effects propagated by shocks. In short, the LLR must clearly distinguish between preventing a monetary contraction and protecting the interests of bank owners and management. The former is a macro responsibility and the latter is not.

6. *The LLR function can be accomplished either through open market operations or loans made at the penalty rate.* The important point is to accommodate emergency demands for high-powered money. For this purpose either method is appropriate. Both possess the added advantage of using market rather than non-market mechanisms to allocate LLR liquidity among competing uses and users.

The Possible Role for an International Lender of Last Resort

Despite its lack of clarity in the contemporary literature, the case for the domestic LLR was clearly delineated and well established with the publication of *Lombard Street* in 1873. Since then, discussions of the LLR have pertained almost entirely to the domestic rather than the international economy, but recently international financial problems have elicited calls to extend the LLR function to the international realm. Indeed, several economists (Kindleberger 1978; Edwards 1980) contend that the IMF is already assuming this role and several proposals (for example, Dean and Giddy 1981) have been made to create an international LLR. Although the literature (especially the earlier literature) coherently describes the domestic LLR function, there are no such delineations of an international LLR role. Sketches of the latter role remain especially vague, with different premises, definitions, and understandings of the function creating semantic problems that further cloud the discussion. To dispel some of this confusion, it is helpful to ask: What can we learn about the possible role for an international LLR from the above discussion of the domestic LLR?

The Role of an International LLR: Lessons from the Domestic Case

As we indicated earlier, the need for a domestic LLR arises because of fractional reserve banking and governmental monopoly of legal tender issuance. While ancillary LLR roles relate to preventing both widespread banking collapse and a widespread call-in of loans and thereby collapse of asset prices, the fundamental role of the LLR is to ensure that disturbances (such as credit shocks) do not destabilize the money supply, protecting it from any sharp decrease.

In the international case, fractional reserve banking is still relevant. Although there is no international legal tender, common currencies and international media of exchange exist—particularly under fixed exchange rates (especially in the case of an international gold standard).[18] Furthermore, many less-developed countries peg their monies to key currencies such as the dollar. Analogous to the domestic case, the fundamental role of an international LLR is to prevent sharp contractions of the world money stock.[19]

To function as an international LLR, an organization would have to be able to create world money; that is, to provide global liquidity in any amount on demand (Hawtrey 1962, p. 274). The world's central banks could turn to an international LLR only if such a body were the ultimate source of international reserves, because if such an international bank had to borrow funds to lend, it would not be the last resort (Dean and Giddy 1981, p. 41). Only where there is a single central reserve-holding bank will responsibility for being an LLR devolve to a single bank.

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[18] An international medium of exchange also exists under "dirty float" systems as evidenced in recent years.

[19] Some disagreements exist as to the appropriate measurement of a world money aggregate. Under a world fixed exchange rate regime, world money is measured as the sum of national monies each multiplied by its fixed exchange rate with (that is, converted into) the numeraire currency. Under a floating exchange rate regime, disagreements exist as to how (or if) a world monetary aggregate can be measured. Whereas some economists contend that such an aggregate cannot be measured under a floating exchange rate regime, others have used various methods to calculate a proxy for the world money supply. Some analysts have converted monies into a common currency by employing end-of-period or period average exchange rates. See, for example, Turney (1982). Others have calculated a global aggregate by measuring the growth of individual monies each weighted by gross domestic product and aggregating the result (the weights based on a benchmarked period). See, for example, Ronald McKinnon (1982) and H. Robert Heller (1976).

An international LLR does not necessarily relate to all "international liquidity" problems. International liquidity problems, for example, sometimes relate to balance of payments (or exchange rate) adjustments. Such adjustments are inherent and necessary elements of an equilibrating adjustment process. Moreover, one country's balance of payments deficit (currency depreciation) is another's balance of payments surplus (currency appreciation). These adjustments, then, are not general, worldwide adjustments but rather pertain to particular countries. Thus, it is not clear that such events call for an international LLR.

In the domestic case, when domestic bank notes are all convertible into a common legal tender currency, there is a role for an LLR since any widespread increase in the demand for the ultimate currency (legal tender) can be satisfied only by its single supplier, the LLR. An analogy to this holds in the international case under fixed exchange rates (where national currencies are convertible into a common international money or currency). For example, if the demand for an international medium of exchange increases and banks face runs from foreign depositors seeking to remove their money (in the form of an international medium of exchange) from the countries in which their deposits are located, it is possible that the respective central banks of these countries would face a run on their international reserves. If these central banks desire to maintain a fixed exchange rate, they may ultimately have to borrow from other central banks or from an international LLR (the ultimate source of international money) which can supply such an international medium of exchange. Under these particular circumstances, an international LLR may be needed.[20]

In the domestic case, when domestic bank notes are not convertible into a common legal tender (as in the case of a free banking system), there is no necessary role for an LLR since there would be no increase in the demand for any type of bank note. Indeed, before the existence of a domestic LLR, suspensions of cash payments (or suspensions of the convertibility of deposits and bank notes into currency or gold), as well as bank holidays, sometimes therapeutically served to limit runs and, hence, to prevent sharp decreases in the domestic money stock.[21] An analogy holds in the international case. If in the international case described above, central banks face a run on their international reserves and cannot attain (or borrow) the international medium of exchange, they may suspend convertibility and allow their currencies to depreciate and thereafter fluctuate freely against other currencies and the international medium of exchange. Just as in the domestic case (without a monopoly of legal tender issuance), an LLR may not be necessary in this instance. Under flexible exchange rates, an international LLR may not be as essential as a domestic

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[20] See Hawtrey (1962, pp. 228, 278) and Smith (1936, p. 169). See also Robert Aliber (1984, p. 26), where he suggests the following instances of the need for an international lender of last resort: *a shift in investor (or central bank) demand from assets with high* credit multipliers to those with lower credit multipliers—from dollar assets to gold or to SDR; and a shift from commercial bank liabilities in one country to central bank liabilities in another.

[21] See, for example, Smith (1936, pp. 38, 40, 45, 134, and 136); and Friedman and Schwartz (1963, pp. 8, 109–10, 124, 157, 160, 163–64, 167, 328).

LLR with monopolized legal tender issuance (Smith 1936, p. 164, n. 1; Moggridge 1981, p. 50; Aliber 1984, p. 27).

An International LLR: Historical Precedents?

Although exact parallels cannot easily be drawn, the purpose of any international LLR would be to provide a backstop or a mechanism to prevent sharp contractions of the world money supply, preventing world shocks (such as credit crises) from developing into world monetary crises. Several economists have asserted that at certain times, international LLRs have (in effect) already existed, and others maintain that the lack of an international LLR has caused some major world financial crises.

Under the pre-1914 gold standard, for example, it is sometimes asserted that the Bank of England took responsibility for stabilizing the international monetary system (Withers 1909, pp. 212, 221, 236). The Bank of England at this time was the world's premier central bank and well understood the role of an LLR. According to Withers (1909, p. 210):

> The fact that London has remained the only market in which every draft and every credit are immediately convertible into gold as a matter of course, has greatly intensified the responsibility of the Bank of England as custodian of a gold reserve, which is liable to be drawn on at any time from all quarters of the habitable globe from which a draft on London may be presented.

Such an assertion led to the belief that the Bank of England served as an international LLR. Fetter (1965, p. 255), for instance, stated in his text:

> [A] widely held belief of economists—expressed more in oral tradition than in formal presentation—[was] that the successful operation of the international economy before 1914 was due to the Bank of England's action as managing director, or as executive secretary, of the international gold standard, and to the City of London's role as an international lender of last resort.

Although the Bank of England may have provided critical central bank services, it did not meet the requirements for an international LLR—the Bank was not the ultimate creator of international reserves.

The lack of an international LLR has been singled out by some economists, notably Charles Kindleberger (1973; 1978), as the primary reason for the worldwide financial and monetary collapse of the 1930s. Certainly, no mechanism was available at that time to prevent the contraction of the world money stock that occurred (Mundell 1983, p. 289; Humphrey and Keleher 1982, pp. 95–100). In fact, the experience of this period led to proposals to create such an institution.[22]

Although established in 1944, the IMF was created, in part, as a response to the events of the 1930s. Some analysts contend that the IMF already acts as an international LLR since it possesses substantial unused financial resources, the power to raise additional funds, a large unpledged gold stock, and the power to issue SDRs (Dean and Giddy 1981, p. 33; Weintraub 1983, pp. 43–44). The IMF, however, was not created to be an international LLR. Indeed, various proposals for an international bank that could create international reserves were explicitly rejected by the United States and other countries at the time because of a fear that excessive international money might be created. The signers of the Bretton Woods agreements definitely wanted to "guard against the possibility of its becoming a factory of international money" (Machlup 1969, p. 340). They therefore did not give the IMF reserve-creating powers. Instead, the IMF was designed to promote world trade and assist member countries with short-term balance of payments deficits through extensions of short-term loans. But the IMF could not then, and cannot today, serve as an international LLR since it cannot create money or international reserves. The only funds it can make available are those resulting from limited contributions made and agreed upon by the member countries. Once the IMF reaches this quota, its funds are exhausted; it cannot simply create money.[23] Since the ability to create money is the critical distinguishing feature of a LLR, the IMF, lacking that feature, falls well short of being a genuine, full-fledged LLR.

The Bretton Woods system was handicapped at its outset by an inadequate supply of liquidity in the form of gold. Because of this shortage, the fact that the United States emerged from the war as the world's largest economy, and the fact that a large portion of world trade was denominated in dollars, the dollar became an international reserve and medium of exchange. During Bretton Woods, then, the world functioned on a dollar standard. Since the Federal Reserve could create such reserves and had an important impact on world monetary growth, the Federal Reserve may have met the criteria for a full-fledged international LLR. The dollar still serves as an international reserve currency, so some economists (see below) believe that the Federal Reserve still meets these criteria.

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[22] In 1932, for example, a report was issued by a cabinet committee in Britain recommending the development of an international institution that would be allowed to issue paper gold, to be called international certificates. (Kindleberger 1978, p. 196).

[23] Actually, the IMF may borrow from any source and in the currency of any member country. However, it must first obtain the consent of the government of the member country in whose currency it proposes to borrow. Thus far it has borrowed limited funds from member countries but never from the markets. Furthermore, in January 1982, the IMF's Executive Board confirmed that quotas should continue to be the main source of funds. See Group of Thirty (1983, p. 2).

Do We Need an International LLR?

In assessing whether we need an international LLR, most economists would agree that some reliable mechanism for preventing sharp decreases in world reserves (or world money) should be established.[24] The question is: What should this mechanism be?

In general, there are two principal positions on this issue, each supported by various groups of economists from various schools of thought. One is that no international LLR is necessary. Some monetarist-oriented economists, for example, assert that under purely flexible exchange rates with reliable (decentralized) domestic LLRs, no international LLR is necessary. In this view, each domestic LLR has the power and ability to maintain and preserve the stability of its domestic money stock. If all domestic LLRs reliably pursue their LLR responsibilities, then sharp contractions of any aggregation of domestic monies will be prevented.[25] These arrangements will be sufficient to prevent monetary contractions, so the creation of an additional international agency is unnecessary.

Ironically, advocates of free money presumably join with most monetarists on this issue. The former contend that an international LLR is not necessary for many of the same reasons that they believe domestic LLRs are not necessary.[26] They endorse a decentralized multi-currency system with competition between monies— a system which was explicitly endorsed by Bagehot[27]—and they oppose the monopolization of the creation of world reserves. Free-money proponents also argue that although individual domestic LLRs have the monopoly of legal tender issuance within their own countries, they are forced to compete with one another in the international realm (as suggested by the literature on currency substitution). All other things equal, such competition (albeit among government-created banks) is beneficial since it compels central banks to impose discipline upon their monetary policies. If their monies are to be acceptable, the central banks must be expected to maintain a stable value, so the dangers of excessive monetary instability are reduced. These economists, therefore, oppose the creation of an international LLR.

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[24] We are not directly addressing the closely related and important issue of alternative monetary arrangements to provide for price stability, but are focusing only on the case for an international LLR.

[25] In the case of the current international debt situation, domestic LLRs can prevent any serious impacts of such debt disturbances on the domestic money stock.

[26] See, for example, White (1981a and 1981b); Smith (1936); and the references cited therein.

[27] Specifically, Bagehot indicated that if he were starting *de novo,* he would have preferred decentralized multiple reserve, competitive note issue arrangements rather than the "unnatural" system that existed when he wrote. But he believed attempting to create such arrangements was not politically feasible.

Another group of economists who join with monetarists and free-money advocates on this issue are proponents of the Public Choice School. These economists oppose the creation of an international LLR because of the dangers of further centralizing the power to make decisions. They contend that the bureaucrats who would manage such an institution would (like anyone else) pursue their own interests and service the needs of their constituents rather than the public interest. Such international agencies, once created, seem never to "die or fade away," but to continue to grow regardless of whether they serve a useful purpose. If an international LLR were allowed to create international reserves, for example, what mechanism would reliably control this institution and shape the incentives of those managing it? A super-governmental agency unconstrained in its power over creation of international reserves can be expected systematically to abuse that power. Public choice economists contend that an international LLR would likely lead to more world inflation and monetary instability, so they oppose its creation.

The case against an international LLR is supported by monetarists, who believe the set of existing decentralized domestic LLRs is sufficient to prevent sharp contraction of aggregations of the world's monies and reserves; free-money advocates, who support competition among multiple monies and who oppose the monopolization of world reserve creation; and public choice economists, who emphasize the dangers of creating centralized decision-making powers in a super-governmental bureaucracy.

Other economists, however, support the creation of an international LLR. Some of these economists, for example, contend that *under existing institutional arrangements*, the most reliable mechanism for preventing sharp contractions in world reserves and world monies entails the creation of an international LLR.[28] In supporting this position, these economists (unlike many monetarists) have recognized that during the 1970s the magnitude of international reserve flows actually increased, rather than decreased, under existing floating exchange rate arrangements.[29] Robert Mundell (1983b, p. 290), for example, contends:

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[28] Historically, many proposals have been made for the creation of a world LLR or world central bank. See, for example, Machlup (1964) and references therein.

> From 1952 to 1969 foreign exchange reserves, mainly dollars and sterling, rose from $16 billion to $33 billion, a little more than doubling over seventeen years. Then from 1969 to 1981 they rose by $272 billion, to $305 billion, almost a *tenfold* increase in only twelve years. . . .

Thus, Mundell recognizes that under current institutional arrangements, the U.S. dollar has served and is serving as an international reserve currency. Indeed, it is possible that this role has actually increased in recent years. Whether we like it or not, we have no choice but to recognize that even under current floating rates the Federal Reserve can create world reserves and that its policy importantly affects world reserves. Consequently, the responsibilities of an international LLR currently fall on the Federal Reserve. Mundell contends that under such circumstances, it would be far better to have a formal international LLR with well-specified objectives than to have the Federal Reserve performing this role. For the other "four-fifths of the world economy does not want a world monetary system based solely on the U.S. dollar, subject to the vicissitudes of U.S. politics and arbitrary management" (Mundell 1983b, p. 287). Moreover, in this view, a system of decentralized domestic LLRs is *not* sufficient to reliably prevent contraction of world reserves and money. Specifically, under current arrangements, there are components of the world money stock which are outside the control of domestic LLRs.[30] And the system of floating exchange rates and currency substitution leads not only to destabilizing movements in world reserves and world money, but to volatile fluctuations in exchange rates and increasing pressures for trade restrictions. Thus, given the world as it exists, it would be preferable to construct alternative institutional arrangements which would more reliably prevent sharp decreases in world money.

Accordingly, Mundell (1983b, p. 292) proposes an international LLR that would have powers to create world reserves. He contends that the issues of this international institution "should be acceptable everywhere and accorded the status of legal tender in every . . . country," and should be constrained by a combination of commodity

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[29] Monetarists implicitly contend that under a purely flexible exchange rate regime, no international component of the monetary base need exist.

[30] Such components, for example, consist of Eurodollars as well as changes in the value of gold reserves due to changes in the price of gold. See Mundell (1983b, pp. 287–88).

(gold) convertibility and constitutional rules.[31] By advocating a package of commodity convertibility plus a global LLR, Mundell extends the Thornton–Banking School–Bagehot LLR prescription to the international sphere.

Some Concluding Thoughts

The purpose of this paper was to trace the development of the LLR concept in the literature and to dispel some of the confusion surrounding it. The LLR concept has long been shrouded in controversy, originally pertaining to the need for and functions of a domestic LLR. Indeed, these issues were central to some key policy disputes in the 19th century and served to polarize important groups of monetary writers into competing schools. These disputes, far from being sterile, served to refine and sharpen the LLR concept, identifying it as a monetary rather than a credit or a banking function and as a protector of the money supply in times of panic.

For the most part, these classical controversies referred to *national* money stocks and *domestic* LLRs. Recently, however, many of the disagreements have been elevated to the level of the international domain, where the key question refers to the necessity for a global LLR.[32] Assuming that this necessity depends on the demand for international reserves (that is, *world* money), and that such demand ceases to exist only in the ideal textbook case of perfectly floating exchange rates, then nations have at least three possible choices with regard to a global LLR. First, they can move to a regime of more perfectly floating exchange rates, in which the need for a world LLR vanishes. Second, they can maintain the existing system of managed floating, in which the U.S. dollar (provided its value remains relatively stable) continues to serve as the key reserve currency and the international LLR responsibility (if indeed it exists) rests essentially with the Federal Reserve. Third, and perhaps most radically, they can create a new supranational institution with reserve-creating powers along the lines suggested by Mundell. Whichever alternative is chosen, the important point is that there must be some mechanism for preventing sharp contractions in world and national money supplies. This is the central message of the LLR literature surveyed in this article. If this message is correct, then stabilizing national and world money stocks, rather than increasing IMF quotas and/or creating new credit facilities, is the appropriate policy prescription for international debt problems.

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[31] A third alternative also exists in the literature. Specifically, several proposals have been made whereby key countries (such as the United States, Japan, and Germany) closely coordinate their monetary policies with the objective of stabilizing the growth of an aggregate of the dollar, yen, and mark. Ronald McKinnon (1982) has made proposals along these lines. Such proposals are a sort of middle ground between a single international LLR and the decentralized domestic LLRs supported by most monetarists.

[32] Free-money advocates, of course, continue to insist on the abolishment of domestic LLRs.

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THE LENDER OF LAST RESORT AND A MONEY SUPPLY RULE

David I. Meiselman

The Humphrey–Keleher paper provides an interesting and illuminating survey of some of the important literature in the history of economic doctrine and in monetary theory.[1] I have little to quarrel with or to add to their historical analysis. Instead, my comments are related to the fact that I believe the paper is incomplete when the authors shift their attention to the current scene. My comments are primarily directed to suggesting some updating of their excellent analysis.

Most of the discussion of the lender of last resort (LLR) concept has been rather vague since Bagehot, as the Humphrey–Keleher paper indicates. The role of an LLR has been framed primarily in terms of worse case, scare scenarios. It would be useful to subject the LLR concept to a rigorous and systematic analysis, including, for example, the appropriate goals, targets, and indicators for an LLR. Such an analysis would produce a body of tested knowledge about what to do (and what not to do) before a crisis.

The term "lender of last resort" may itself be a source of much mischief and confusion. One reason is that the term confounds money and credit, and similarly confounds the problems of credit markets and those resulting from sharp changes in the quantity of money, especially a monetary collapse. The Humphrey–Keleher analysis points this out very clearly, and I have nothing to add to their analysis on this issue.

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[1] Thomas M. Humphrey and Robert E. Keleher, "The Lender of Last Resort: A Historical Perspective," *Cato Journal* 4 (Spring/Summer 1984): 275–318.

It is useful to evaluate alternative monetary regimes, as the authors have done to some degree, and in the process, to examine the stabilization properties of alternative regimes, even under various "scare" scenarios. For example, consider a regime characterized by fractional reserve banking and a money supply rule that fixes the growth rate of money. Assuming a financial panic, can there really be a "liquidity" crisis?[2] In my judgment, it would be most unlikely, perhaps close to impossible.

If the monetary authority abides by the money supply rule, it is hard to see any role for an LLR. Under a money supply rule, it seems to me that we would have a situation similar to the one that Bagehot described, where the monetary authority would make "funds" freely available to maintain the desired money stock. This would be the credit aspect of not permitting the money supply to collapse when there is an increase in the currency-deposit ratio or the reserve-deposit ratio which, for a given stock of reserves, would lower the money multiplier and contract the money supply. Alternatively, with a monetary base rule, some deviation from a base target may be desirable when there are significant changes in the currency-deposit ratio or in the reserve-deposit ratio, as may occur during a panic.

Most of the discussion of a money supply rule has emphasized its desirable price and output stabilization properties. Perhaps we should also add the desirable credit stabilization or LLR qualities to a money supply rule, as well.

With respect to institutions and phenomena peculiar to the United States, I am especially curious about the role and connection between the Federal Deposit Insurance Corporation (FDIC) and the LLR function of the monetary authority, especially given the unique role of the FDIC in the U.S. banking system. I believe this merits extensive and serious treatment.

Although I appreciate the interesting and useful survey of the history of doctrine regarding the LLR, I believe it would help the discussion if we considered the question: What would have happened in the past decade if the Federal Reserve had engaged in *no* micro bailouts, and instead, had tried to maintain whatever money stock was indicated by their own targets? For example, what if, under Arthur Burns, the Fed had not taken special steps to bail out Franklin National Bank, or, under Paul Volcker's chairmanship, what would have happened if the Fed had achieved its money targets but there had been no central bank intervention in the silver crisis, or when the Mexican debt problem surfaced in August 1982?

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[2] The term "liquidity" remains quite vague, and I continue to search for a good, workable definition.

Incidentally, I take issue with the notion advanced in some quarters that the turn in monetary policy in mid-1982 can be attributed to the Fed's response to the Mexican debt problem. The Mexican debt problem came to a head in late August 1982, which was *after* interest rates had fallen sharply and *after* the Federal Reserve had changed monetary policy in June 1982, when it shifted from an overly tight monetary policy (with essentially no money growth for six months) to an overly easy monetary policy (with M1 growing at 15 percent per annum). Thus, even if the Fed had intervened to help Mexico or Mexico's bankers, or if the Fed were to intervene to supply credit to an improvident foreign government, I do not see the connection between that step—whether merited or not—and the necessity to move from zero money growth to a 15 percent growth path for M1.

I believe the alternative explanation of Fed monetary behavior in mid-1982 was that the economy was in very poor condition, that the forecast for economic recovery had not been realized, and that the Fed, and especially the administration, panicked in the face of upcoming congressional elections.

Finally, the Humphrey–Keleher paper discusses Robert Mundell's recent proposal for an international LLR with powers to create world reserves. This proposal is simply another request for still another printing press, run by still another group of international bureaucrats, with the result being still another engine of inflation. We and other countries have more than enough problems with our own central banks without adding another. However weak the constraints happen to be on the central banks of individual countries, these constraints are even weaker when international civil servants are in charge.

THE IMPOVERISHING EFFECTS OF FOREIGN AID

Manuel F. Ayau

Introduction

The way the current debt crisis of some countries is frequently being analyzed is reminiscent of prior occasions when the solution was considered to be subsidized bail-outs of debtor nations by the governments of lending nations or by international financial agencies. These attempted solutions, however, have in most cases aggravated the problem. And those debtor nations that have achieved some economic success have achieved it in spite of, not because of, foreign aid.

In his book, *Will Dollars Save the World?* (1947, p. 29), Henry Hazlitt recalled the doubts that John Maynard Keynes raised about U.S. lending to Europe in 1919:

> "The chief objections to all the varieties of this species of project are, I suppose, the following. The United States is disinclined to entangle herself further (after recent experiences) in the affairs of Europe. . . . There is no guarantee that Europe will put financial assistance to proper use, or that she will not squander it and be in just as bad a case two or three years hence as she is now. . . . In short, America would have postponed her own capital development and raised her own cost of living in order that Europe might continue for another year or two the practices, the policy, and the men of the past nine months. . . .
>
> ". . . If I had the influence at the United States Treasury, I would not lend a penny to a single one of the present Governments of Europe."[1]

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[1] Quoted from Keynes (1920, pp. 283–84). Even though Keynes had reservations about foreign aid to Europe, he did not oppose such aid. However, he would attach strict conditions to the loans, which would have to be "repaid in full" (Keynes 1920, pp. 286–87; and see Hazlitt 1947, p. 30).

"These are not the words of some American 'isolationist' in 1947," said Hazlitt, "They are words of the most influential British economist of the last generation." Hazlitt (p. 30) went on to argue that they applied with equal force to the conditions in 1947. In this regard, it is useful to recall that in Germany it was not until liberalizing and free-market policies were implemented in 1948 that economic progress was initiated.

In spite of the repeated failure of U.S. foreign aid in the past 25 years, the attempt to throw money at international problems is pervasive. Perhaps if we had a clearer understanding of the roots of the problems confronting those less developed countries (LDCs) that are most affected by the current debt crisis, we could approach a more rational solution.

Roots of the Debt Crisis

Most analyses of the debt problem have focused on the best method of financing the debt payments. This is a real problem, but it does not go to the heart of the issue: the inefficient productive structure of the debtor-problem countries (DPCs). In order to solve the problems of the key debtor nations, we must understand the cause of their inefficient structure of production.

It is abundantly clear to me that the crux of the problem of inefficient production is a problem of education—not a problem of illiteracy, but a case of the total failure of education at the highest level to convey an understanding of basic economic concepts. I am not necessarily referring to knowledge of economics on the part of holders of degrees in economics. I am referring mainly to intelligent, articulate policy makers, most of whom have a college education. I came to this conclusion when in my quest for answers to the problems of poverty and underdevelopment, for every sensible explanation, I would encounter hundreds of unsatisfactory, contradicatory rationalizations and myths.

My first inclination, in looking for the source of poverty, was to look for evil people who were intent on making us poor. I have since forsaken this inclination. The problem is much more serious: We are kept poor by well-intentioned people who are largely ignorant of sound economic logic and who operate in a nonmarket environment. For example, with very few exceptions, government officials entrusted with designing policy in DPCs deny that there is a connection between the exchange rate and the level of employment, or that overvaluing or undervaluing foreign exchange perpetuates production patterns that are inconsistent with a country's comparative advantage.

The world educational system is very much derelict in not providing our youth with a clear understanding of the mechanisms that coordinate peoples' endeavors in society. In my studies in three different countries, I was never exposed to explanations of the constraints of the marketplace, of the price system as a system of communication, and of how under voluntary exchange one man's gain is not another's loss. This ignorance, which I shared, is the reason why the market is discarded as chaotic and unjust, and why government-planned economic solutions are invariably adopted. This educational abyss is, in the end, the cause of the debt problem.

Analyzing the Debt Problem

Views in Creditor Countries

On reading the work of Weintraub (1983), Cline (1983), Roberts (1983b), and others, as well as examining some of the isolated data, I have come to the conclusion that the current debt problem, serious as it is, is not catastrophic and definitely not something that could not be readily cured by sound policies in most of the debtor countries. But this conclusion hinges on the assumption that the debtors will not be prevented from making the necessary adjustments by official bail-outs. If no subsidized bail-outs were forthcoming, some creditor banks would have to write down part of their assets. This would no doubt have some adverse economic consequences, but certainly not the dire consequences suggested by Treasury Secretary Donald Regan (1983) during his testimony in favor of the IMF quota increase last May before the Senate Appropriations Committee.

When the solution to the debt problem is discussed in the creditor nations, much faith is put in the trickle-down theory. As the recession in industrialized countries recedes, the prices of the commodities exported by the debtors will increase. As interest rates decrease in the industrialized countries, the debtors' capacity to service the debt will increase. As inflation goes on in the developed countries, the real debt will decrease.

Feelings are mixed about the effects on the DPCs caused by a change in the price of oil. For example, if the price of oil rises it will mean a boom for Mexico and Venezuela and other oil net exporters, but a tragedy for Costa Rica, El Salvador, Bolivia, Chile, Brazil, and most of the other countries who are net importers. Incredibly, a worldwide rise in the price of oil, which only a few years ago was considered a tragic event for the world, today is looked upon benignly by creditors of oil exporting countries, solely because it helps solve the problems of a few banks, regardless of the detrimental effect on the quality of life even in their own countries.

I do not mean to underestimate the effects of changes in the economies of the creditor nations on their debtors. An increase of $1.00 in the price of oil adds $250 million to Brazil's annual oil bill, and an increase of 1 percentage point in the interest rate on Brazil's external debt adds about $600 million to her indebtedness. My point is that exogenous forces, such as oil-price shocks and high interest rates, were not the main cause of the problems currently facing the DPCs; they were only a contributing factor. Focusing on them at best only delays a solution, and very likely will aggravate the problem.

It is true that a minority of people in creditor nations have identified the true cause of the problem: the economic policies of the DPCs. Unfortunately, this minority so far has been ineffectual. It is also true that many of these impoverishing economic policies have been induced or made possible by the creditor countries themselves. The uneconomical and overwhelming proliferation of state-owned enterprises in the DPCs, for example, could not have occurred in the absence of aid from creditor governments or international agencies.

In his remarks before the Senate Appropriations Committee, Treasury Secretary Regan (1983, p. 8) identified some of the economic policies that have impoverished the DPCs: "rigid exchange rates; subsidies and protectionism; distorted prices; inefficient state enterprises; uncontrolled government expenditures and large fiscal deficits; excessive and inflationary money growth; and interest rate controls which discourage private savings and distort investment patterns." The reality of the situation, however, is that the secretary's remarks appear to have been made in passing; for as Paul Craig Roberts (1983a, 1983b) has pointed out, the internationalization of the bail-outs enfeebles any attempt to influence the economic policies of DPCs. Even worse, it invariably puts the solutions in the hands of those who recommended the impoverishing policies that caused the problem in the first place.

Thus, even though sound analyses and criticisms are sometimes heard in the creditor nations, the views that prevail in the circles of ultimate decision making are not a cause of optimism for those of us in the poor countries who believe that only through a free-market economic organization can we produce the necessary wealth to pay our debts, while simultaneously raising our quality of life.

Views in Debtor Countries

In the debtor nations the discussion of solutions to the debt problem offers less cause for optimism. The German news service DPA reported in *La Hora*, on 15 November 1983, that at the meeting of the Federation of Latin American Banks (FELABAN) in Bogotá, Colombia, which included delegates from 16 countries and 600 banks, the most important Latin American bankers warned that applying extreme austerity measures to service the region's exorbitant debt would cause desperation, revolt, and catastrophe. The usual rationalizations, attributing the unfortunate circumstances to Uncle Sam—a popular whipping boy—and to the world in general were included in the news report. The report also contained all the usual remarks about oil price increases, deterioration of the terms of trade, high interest rates, and the world recession as the culprits. There was little reference, however, to the failures of the domestic policies of the debtor countries, which have made our economies so vulnerable, so inefficient, so inflexible, and so wasteful.

The final declaration of the FELABAN was an essentially empty and naive statement, abundant with deterministic lamentations—a symptom of the gravity of the problem. The signatories recognized that the debt, as it is now structured, is unpayable, and that the past year's experience shows that the possibility of payment is becoming even more remote. Of course, they recognized that debt servicing must be adjusted to the debtor's ability to generate foreign exchange. They also expressed the hope that exports will increase, and suggested that imports be restricted to essentials. But the FELABAN signatories offered not one word about the internal policies required to achieve those aspirations; they only mentioned that the creditor nations should lower import barriers.

The attitude throughout the FELABAN document is that the burden of the solution lies with the creditors: they must be flexible, softer, fairer, patient. One gets the feeling that our DPCs are victims of too much credit and of unfortunate acts of God, of impersonal forces beyond anyone's control, totally oblivious to the fact that our problems are the predictable results of our own prevailing economic policies. For instance, the document stated that all currencies "*suffered* devaluations or are subject to them," so debtors now face "disproportionate and unexpected burdens." This reminds me of the childish expression "the glass, it broke." The authors of the document apparently had cause and effect inverted when they referred to ". . . massive devaluation and consequent inflation."

The FELABAN's imaginative solution to the debt problems of the DPCs was renegotiations and more credits to keep the debtors alive in the hope that someday, somehow, they will repay their debts. The naiveté goes to the length of suggesting that an attempt be made to convert external debts into equity capital. This suggestion, however, is ludicrous, considering that most of the debts belong to uneconomical state-owned enterprises (SOEs). The typical attitude of less developed countries (LDCs) toward industrialized countries is expressed in the FELABAN's demands that the latter increase their subsidies to the IMF. The bankers even suggested that pressure by the IMF be applied on the creditor nations to avoid "inequalities" in the disbursement of pressure on the DPCs. Finally, there is a bit of blackmail in the FELABAN statement, announcing dire geopolitical consequences if a bail-out is not forthcoming soon. Nowhere in the statement do the Latin American bankers mention the impoverishing domestic economic policies or offer any suggestions for real reform. Most discouraging is the fact that the FELABAN declaration is not intended to be a political (demagogic) statement, but is truly meant to be a serious document.

Much of the FELABAN rhetoric reappeared in a Plan of Action (PLAN DE ACCION) adopted by Sistema Economico Latinoamericano (SELAM) at its January 9–13, 1984, meeting in Quito, Ecuador. Representatives from all Latin American countries attended the meeting, and the Plan of Action was signed by five chiefs of state, three vice presidents, and members of the cabinets of all countries attending. SELAM's secretary, Mr. Sebastian Alegrett, had stated earlier that under the present conditions, Latin America can neither pay its foreign debt nor demand more sacrifices of its people.[2]

SELAM's Plan of Action declared that responsibility for indebtedness must be shared by the creditor nations, who must reduce the cost of servicing the debt, stretch out payments, provide more resources to ensure development in the DPCs, and eliminate trade restrictions. The SELAM document included vague proposals recommending more and better clearing houses, emancipation from the dollar, more studies, more meetings, and more international, regional, and subregional institutions.

SELAM apparently ignored the fact that Latin America is already well-supplied with cadres of intergovernmental institutions, such as SELA, CEMLA, CEPAL, UNCTAD, PNUD, ALADI, SIELA (Energy), IDB, and BCI, which are the principal advocates of interventionism, regulation, uneconomic diversion of trade through highly protected common markets and trade agreements, SOEs, and all the policies that have brought about our predicament. This is a typical example of how official institutions invariably propose to correct the failures of intervention with more of the same. The failures of the SOEs for instance, did not inhibit SELAM from suggesting multinational SOEs: A Latin American multinational for the fertilizer industry (MULTIFER, S.A.), the fishing industry (OLDEPESCA), energy cooperation (PLACE), and a tanker fleet. Again, nothing was included in SELAM's final resolution (PLAN DE ACCION) on internal policies; neither was there a suggestion to allow more freedom to the citizens of Latin America so that they may solve their own problems.

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[2] UPI *news service report*, 15 November 1983.

It is ironic that the utter failure of our interventionist economies are typically blamed on the market, on capitalism. The fact is that after the economic rule of "free enterpriser" Mr. Martínez de Hoz, Argentina was about as free-market as Yugoslavia, according to Larry A. Sjaastad (1983, p. 1129). The fact is that in Chile, as Daniel Wisecarver (1983, p. 98) tells us, "state enterprises satisfied 20% of total demand in the economy in 1981 . . ." and the capital of the twelve most important companies of CORFO [a state-owned holding company] amounted to 60% of all enterprises registered in the stock exchange. The fact is that three basic resources in the Chilean experiment—the labor market, the credit market, and the foreign exchange market—were not free. Nevertheless, all of these facts do not alter the perception that it was the market economy that failed.

The high tariffs in Latin America, the overregulation, economic controls, and so on do not seem to affect the perception that "capitalism" is the cause of our problems, and that to solve them, we must intervene further and receive more aid. Our systems are not even identified as "state capitalism." We do not allow the market to work, but blame it for our failures, while the black markets and the underground economies (the very hampered free markets) keep our economies from total collapse.

The Opportunity for Reform

I see the present situation as an opportunity to correct this lack of understanding, to allow circumstances to force the reconsideration of alternatives, and to revise the diagnosis of the causes of the problem. The climate is propitious, but alas, I am convinced that an official bail-out will again abort any meaningful reform.

The nature of the discussion must change before a sound solution can be brought about. The following two points must be stressed over and over again. First, we (I speak for Latin America) are a continent wealthy in land, climate, and natural resources. Paradoxically, the wealthiest countries (Mexico, Venezuela, Brazil, Argentina) are the ones with the biggest problems. Obviously it is we who are doing something wrong, and not a case where something wrong is being done to us from outside. Second, the turnover of government leadership is notorious. It is not credible that we have simply been unlucky and have been damned by a succession of rascals: The system is at fault.

Removing Barriers to Free Trade

The prevailing notion that the market does not work so we must practice interventionism is belied by the fact that our countries are staying alive because of black markets and the underground economy. The slogan that "the free market works in theory, but not in practice" is therefore also disproved: The market does work in practice, but not in *official* theory. We must learn that in order to generate foreign exchange, we must decontrol foreign exchange transactions and lower import and export duties.[3] Debtor countries must be questioned on their practice of deliberately subsidizing the spenders of foreign exchange at the expense of the earners of foreign exchange, by underpricing the dollars their governments forcibly buy and sell. The uneconomic diversion of all resources caused by this perverse practice alone guarantees the impoverishment of any country, no matter how richly endowed.

In my country (Guatemala), the ridiculous case of free travel exemplifies the counterproductiveness of an overvalued currency. Thousands of people who never dreamed of visiting their many relatives who emigrated to the United States, now do so at no cost to themselves. They first purchase, at the official rate, the allotted amount of dollars with borrowed local currency, which they pay back immediately after selling on the black market part of the dollars they had purchased. What they do not sell is sufficient to buy a plane ticket and still have some spending money left over for their trip. This also allows people who have a second home in the United States to bring along a servant or two to cook and wash the dishes free, perhaps even making a few dollars in the process. The planes are full. More, since the quota system does not permit you to take the same servant with you more than once a year and make money out of the trip, many other servants are getting the opportunity to visit the United States, courtesy of the Guatemalan Central Bank.

Besides the high export taxes paid by the producers of foreign exchange, the subsidization of imports paid by exporters is the largest single factor burdening and depressing our agricultural export sector.

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[3] It is not generally recognized that an import duty is a tax that lowers the yield to exporting activities. It is a tax on the production of foreign exchange, because to the degree that it restricts imports, it reduces the demand for—and thus the price of—foreign exchange.

Much more so than the much-lamented deterioration of the terms of trade. In Guatemala it was recently estimated that, considering the effects of import/export duties, the real cost of foreign exchange is 142 percent of the official rate. If the exporter were to be paid the true worth of his foreign earning in local currency, he would reap the equivalent of a 42 percent increase in his gross income. How our foreign exchange earnings would leap!

Yes, the increase in the cost of his imported inputs would reduce his increase in profit to somewhat less than 42 percent, but imported inputs are only a small fraction of the costs, especially in the labor-intensive agricultural sector typical of developing nations. Thus, freeing the foreign exchange market of governmental controls would be a sure cure for unemployment in the DPCs. It would also create jobs in the industrialized nations as they provided us with lower-priced goods for what are now protected, uneconomical, import-substitution goods.

Freeing Private Capital

How many of our central bankers or policy makers contemplate such a process? How many of them would be willing to admit that the vast amount of flight capital, estimated at more than $40 billion in the last two years,[4] is the effect of the low yield and poor investment prospects brought about by overregulation and hostility toward private capital and free enterprise? If our own capital flees, how can we expect to attract foreign investment? Finally, how many policy makers really are aware of the function of capital or know how much investment is needed to create high-productivity jobs for their country? These topics will only receive serious discussion if there are no official international financial bail-outs, so we are forced to search for other solutions to our economic problems.

Private capital is available, but we must compete for it. Recently I was visited by an investment advisor to Hong Kong capitalists. With 1997 in mind, they are looking for countries to which their capital could flee. One can anticipate that they will probably encounter a hostile climate, instigated by local lobbies of the organized industrial and financial sectors—the same groups that will applaud the new policies of channeling foreign aid through private enterprise.

International (mainly U.S.) financial aid has permitted and encouraged the statization of our economies. In general, the bigger the role of SOEs, the bigger the debt problem; because these enterprises own a large portion of the debts. SOEs were originally considered good debtors because they enjoyed the unlimited guarantee of their governments, so indirectly they have the coercive power to tax.

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[4] *Impacto,* 7 January 1983.

According to Mexican economist Luis Pazos, the Mexican government owns about 1,000 enterprises, some discotheques. Twenty-seven SOEs account for 85 percent of Mexico's foreign debt, and 58 percent of the public-sector foreign debt is owned by four enterprises: PEMEX, FERROC, CONASUPO, and CFE.

In Brazil, as of 1981, one-sixth of the country's supermarkets were state-owned. For each cruzeiro spent on conventional public investment, three cruzeiros were invested in Brazil's SOEs. Transfers of public funds to SOEs account for 77 percent of total public expenditures and for more than 25 percent of Brazil's Gross Domestic Product. More than 250 new SOEs were established over the past 10 years. The government is the owner of over 500 financial and industrial and commercial companies. According to Brazilian economist Paulo Ayres, these enterprises together with governmental agencies, are responsible for 70 percent of the nation's total foreign debt. Government enterprises in Brazil deal in autos, building products, footwear, and even buttons.[5]

In El Salvador, government-owned banks and finance companies held more than 40 percent of the nation's credit, but at the suggestion of the U.S. State Department the government confiscated 100 percent of the banking system. This is the type of ruinous policy that sometimes comes with aid, along, of course, with land reform, which typically destroys agricultural-production incentives.

Of course, all governments worthy of their "underdeveloped" status are in the businesses of land, ocean, and air transportation, chemicals, power, communications, and subsidized theaters for the cultured elite. But it is not only the accounting losses of the SOEs themselves that must concern us. The greatest damage arises because SOEs almost invariably produce at higher-than-competitive prices. Everyone who uses their services or products incurs higher costs, and since the activities of the SOEs encompass such vast and basic spheres, they make the whole economy less competitive.

This statization is the unavoidable result of aid programs that, throughout their history, have placed large amounts of soft credit (few strings attached, few questions asked) at the disposal of statist bureaucrats. Had this boon not been available to them, our debts would be minimal and our capacity to pay would be more than satisfactory. Enterprises would have been built with risk capital and without the coercive powers to impose the higher-than-market prices that reduce our capacity to pay. I do not hear any IMF conditions suggesting the sale of money-losing SOEs, although the World Bank's 1983 *World Development Report* does bring up the point, meekly.

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[5] *Wall Street Journal*, 17 November 1983.

Some Concluding Recommendations

If the banks are not going to be allowed to find their own solution and adjustments, the next best suggestion is the one made by Paul Craig Roberts (1983b, p. 16): "If there really is a crisis requiring a bailout, we should do it by setting up a temporary revolving fund. Then, when the crisis is over, the donor countries could withdraw their funds for their own use." This fund would be an alternative to the U.S. contribution to the IMF, where the DPCs have political clout.

I believe the revolving fund can be an effective way to help resolve the debt crisis, but only if it is announced that the fund's resources are available under specified conditions. The most fundamental condition should be the establishment of a plan to free the DPCs' economies by discarding the interventionist policies that have prevented the people of these countries from creating the real wealth necessary for repaying the debt. The fulfillment of this condition would mean, with few exceptions, that those debtor countries that wished to qualify for loans would be granting freedom to their people and therefore would not need much help. By releasing the creative energy of the people and allowing the market to work, I would not be surprised to see growth rates of 10 percent and even more.

The many people who favor freedom in the poor countries, who feel a bit lonely, would be greatly encouraged to speak out. The political higher-ups would have to question the advice of their technical staffs and of the many inter–Latin American institutions (such as CEPAL, CEMPLA, and SELA) which have contributed so significantly to the impoverishment of our countries. Socialism and socialists are already more and more in disfavor. The climate is not as hostile towards the market as it was. There already exists many free-market-oriented people throughout Latin America. Many have come to conclude that P. T. Bauer was right all along regarding the impoverishing effects of foreign aid.[6] It is propitious to convert an impending disaster into a great opportunity. And this could well occur, provided, of course, that for humanitarian reasons official foreign financial assistance and subsidized bail-outs are brought to an end, so that the interventionists lose their financial support, and we have no choice but to get down to the business of producing wealth through the market system.

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[6] See, for example, Bauer (1972 and 1981).

Any radical change in policy has its "social cost." But we must not underestimate the resiliency of people; Latin America, especially, is constantly undergoing violent changes of one kind or another. Many policies may have to be phased out gradually, such as tariffs on exports and imports, but other policies, such as the freeing of exchange rates, must be done overnight. More important than where we are is where we are going. And there is little question that the social cost of change is much lower than the social cost of not changing.

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LIBERALIZATION POLICIES AND THE IMPLEMENTATION QUESTION

Sven Arndt

Professor Ayau (1984) has written a provocative paper, to say the least. In a scant 12 pages, he tells us what he likes and makes very clear what he dislikes. He identifies the culprits who led us into the debt crisis, and he is impressively certain about what it will take to get us out. Unlike many other studies, this one addresses the longer-term issues.

The Liberalization Argument

In his paper, Professor Ayau places the debt crisis in the context of economic development. He examines the shortcomings of development policy in the debtor-problem countries (DPCs) and traces the difficulties to interventionist policies in the DPCs. In his view, it is the activist, statist economic policies in the debt-ridden countries of Latin America that have been the stumbling block to economic progress, rather than external factors such as the oil price increase and high interest rates.

The argument that interventionist economic policies in the DPCs have restrained markets in various ways and made developing countries more vulnerable to external disturbances is certainly worthy of serious consideration. Moreover, Ayau extends it by applying it to foreign aid, where he argues that U.S. and other international aid has made possible the kinds of interventionist policies that he believes have seriously retarded development in the DPCs.

Professor Ayau sees the current debt crisis as an *opportunity* to reverse these distorting policies. In the absence of official bail-outs, the debtor nations would be forced to reevaluate their domestic

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economic policies and shift to more market-oriented ones. Hence, the danger is that foreign aid and various bail-out programs will sustain existing elites and existing policy-making processes, thereby squandering a marvelous opportunity.

Other sections of the paper address various issues, including the education of the elites—they have a poor understanding of the role of markets and prices and the bases on which decisions are made. But the basic thrust is an argument for economic liberalization. If markets had played a more substantial role, many of these countries would now be much better off. They would have higher standards of living; they would not have been impoverished; and they would not have debt problems because markets would have prevented the excessive flows of capital of recent years.

I find Professor Ayau's line of argument quite intriguing, especially as it relates to overregulation, constrained markets, and price rigidities that have plagued the DPCs. I would agree with him that the abundant resources of Latin America could and should have been more efficiently managed and allocated. I do, however, have several questions concerning the means of implementing Professor Ayau's free-market policies.

The Implementation Question

Professor Ayau is not very explicit on what it would take to change the way things are done: How do we get there from here? He makes some suggestions such as removing certain subsidies, reducing protectionist policies, eliminating exchange controls, and so on. But the catalog of suggested reforms does not provide an integrated policy program. There is little discussion of the process that would transform rigid, debt-ridden economies into the open, market-oriented systems envisioned by Professor Ayau. While it is relatively easy to say, "Free the markets," the real challenge is to bring an effective market-based system into being.

There are difficult questions about the transition process that must be addressed. Would gradual decontrol work better than shock therapy? While Professor Ayau is not entirely clear on this point, he seems to favor the shock treatment. For example, at one point he says that relaxation of controls on exchange rates "must be done overnight." But he thinks other distorting policies such as tariffs "have to be phased out gradually" (p. 334). One needs to find a way of dealing with the transition problem for both humane and economic reasons, and in order to make certain that distorting controls do not continue to interfere with personal freedom and efficient resource allocation.

There is a substantial literature on the question of gradual versus rapid transition to a new policy regime. Moreover, liberalization raises questions about whether the financial and real sectors are to be liberalized at the same time and speed. This is a very important issue because simultaneous as opposed to sequential liberalization will have diverse effects on the way in which resources are reallocated.

Liberalizing financial and exchange markets first may bring in new and different sources of capital, and Professor Ayau emphasizes the importance of competing for private capital as opposed to relying on official foreign aid. Moreover, financial liberalization followed by liberalization of agriculture and manufacturing encourages patterns of resource allocation that may differ substantially from those associated with a liberalized real sector combined with controlled capital movements. Even in the United States we have seen how, for substantial periods, real exchange rates can move in ways that are dominated by financial considerations and depart significantly from purchasing power parity. Such movements in real exchange rates in turn influence the allocation of resources.

In a shift from a restrained economy to one of free markets, the resulting resource allocation will be influenced by the way in which liberalization is phased in. This important issue needs to be studied carefully before alternatives regarding the actual process of liberalization can be properly evaluated. Moreover, even if markets are liberated, there would presumably remain a legitimate role for government; namely, to set the basic economic framework with tax, competition, and regulatory policies. The proper role of government is a major issue in many of the debtor countries, but the questions extend to the optimal institutional framework that would nurture and sustain the open-market system envisaged by Professor Ayau. There are distributive implications here as well. The tax and regulatory environment that would develop under a more liberal policy regime in the DPCs would alter relative prices and hence the distribution of income.

In conclusion, Professor Ayau addresses several important issues related to the debt crisis, but his paper is a little like the first chapter of a book in which later chapters must develop in greater detail the means that bring about the better world he has in mind.

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THE INTERVENTIONIST DISEASE AND THE IMF'S AGENCY COST ROLE

J. Richard Zecher

I found a great deal to agree with in Professor Ayau's paper (1984). It was quite provocative. I would like to add only a few points of my own and tell where I differ, subtly, from him. Some of the issues raised are worth drawing together here.

The Interventionist Disease

First, Professor Ayau's main theme is one with which I totally agree: The interventionists' policies have led to enormous misallocations of resources in the borrowing countries. This is a major factor—in fact the major factor—explaining their present problem.

The list of these distortions is long and dreary. Most of us are familiar with them, but let me quickly mention a few:

- Government takeovers of entire industries of the underdeveloped countries, particularly the infrastructure industries, leading to their deterioration. Some forms of decay are potholes in roads, trains that are late, and utilities whose prices are high, but whose quality of service is low. These provide all kinds of incentives for antisocial behavior.
- The proportion of government in the total GNP rising inexorably through time. This growth is coupled with high tax rates on income and other tax bases that also induce such antisocial behavior as corruption and black markets.
- And finally, of course, the debt crisis accompanying these ills.

I have to admit I was well through Professor Ayau's article before I realized he was talking about Guatemala and not about New York

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City. At about the same time I was reading that New York's Governor Cuomo had come out in his most recent budget with a proposal to set up a new venture-capital state agency using surplus funds. Surely everyone knows that venture capital is a feeble infant industry in New York, and that we therefore need some government help to get it going.

The point here is that while I agree completely with Professor Ayau's views on the developing countries, it is also true that the same disease infects the developed countries as well. And it infects places within the developed countries differently; Cincinnati is not run the same as New York.

The Incentive to Redistribute Wealth

The second major theme of the paper (and I also agree with this) points out the lamentable ignorance of policy makers and the general public concerning the nature of the market mechanisms that coordinate the economic endeavors of individuals and of society. I would add that the depth of this misunderstanding is profound both in debtor countries and in creditor countries.

But is this the major cause of bad policies? I have to raise real questions about that. I am not sure one can lay too much at the doorstep of ignorance. I think what drives most of the bad policies we are talking about is a desire to redistribute wealth in order to acquire short-term gains or political power. It is not simply ignorance. If ignorance were the only problem, I think we would have an easier set of solutions to consider.

The Effects of Foreign Aid

Let me return to a third major theme with which I also agree. The creditors (and in this paper Professor Ayau has really focused on international/multinational lending agencies) have enabled these bad policies to be pursued—with significantly greater rigor and for a longer time than they would have been without international credit. I thought that Professor Ayau was being polite when he did not focus also on the *private* debt that plays the same role in this process. Of course, private debt decisions are not driven by the same criteria; nonetheless, to the extent that his criticism is valid for the debt of these multinational agencies, it is valid too for the private debt.

Two subtle differences should be taken into account, once one has agreed with that basic point. First is the enormous variability within the underdeveloped world (just as exists within the developed world and between the developed and underdeveloped worlds) in their use of these misallocating, relative-price-distorting policies. One has only to compare the Asian developing nations with the African developing nations as a group to see how great the variation in applying these policies is. Latin America, I would say, falls somewhere in between. (It is always difficult to treat any of these countries as a group.)

The basic point here is that while debt may make those misallocating policies easier, some debt-ridden countries have very low distortions by world standards, while some low-debt countries have huge distortions. Thus we need to apply a subtlety to understanding the role of debt in abetting these bad policies.

The IMF's Agency Cost Role

The second difference relates to the roles of these international agencies (I am speaking of the World Bank, the IMF, and the OECD). I have been with The Chase Manhattan Bank about two-and-a-half years. During those years, I have spent a lot of time with the person to whom this conference is dedicated, Bob Weintraub, particularly when he was working on his two major publications in this area. Over that period, I came to see the roles of these agencies in a rather different way than I saw them when I first started.

One difference, for example, is that each of these agencies transfers wealth. They may transfer it through aid, through subsidized lending, or in other ways; but they have other roles too. A hypothesis has occurred to me that the major role of the IMF (if we can believe most of the estimates about the amount of resources transferred to the developing nations) cannot be to transfer wealth, when the IMF has as much support as it does.

The major role of the IMF may instead be what Mike Mussa, that great social philosopher, said yesterday when he pounded his rubber truncheon at the podium: "One at a time!" The IMF role, I believe, is basically an agency cost role.[1]

World history shows that capital has always tried to seek out its highest-value use. My hypothesis is this: If you divide the world into three periods according to how capital was allocated and what kind of agency-cost mechanism was in place to protect creditors' interests, you can characterize the three periods as "The Army Goes with the Capital" period, "The Navy Goes with the Capital" period, and the current period.

An example of the first would be the Roman invasion of Britain. Rome sent its army, built up the infrastructure, and took the rewards.

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[1] The theoretical framework for agency-cost theory is developed in Jensen and Meckling (1976).

The second period would be the gunboat era. The navy, it turns out, provided a much cheaper way to enforce contracts; It was able to apply force only when it needed to, and the rest of the time it could do something else.

Finally, we come to the current period. The way I view the role of the IMF—or at least a very important part of its role—is that it is a nexus of the web of contracts. It serves, in fact, to enforce contracts, particularly in a troubled time such as the one we are in right now.

Why is there this kind of syndication of international loans? Why do you bring in 1,500 banks from the United States and all over the world? Why do you try to involve the various governments and government agencies? I think an important part of the answer can be found in agency cost theory.

Let me make a forecast—and a wish that will not be fulfilled. The forecast is that capital will continue to seek its highest value of use. Thus there is uncertainty over the directions it will take in the future. If this recently developed IMF role (only in the last 10 or 15 years has the IMF played this role) is reduced or eliminated, what will take its place (on the assumption that my forecast is correct)?

My wish is that Bob Weintraub were here to help me to answer this question. Certainly my experience was that Bob always had some of the most creative, interesting, and thoughtful solutions to the most difficult kinds of problems.

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COUNTRY DEBT PROBLEMS: THE BRAZILIAN CASE

Carlos Geraldo Langoni

The Continuing Debt Crisis

It is frustrating that only a year and a half after the Mexican default we are once again back to where we started. The financial markets continue to be paralyzed for the majority of less developed countries (LDCs). Negotiated loans with extremely high transaction costs have been substituted for normal market forces. The banks are stuck with large stocks of de facto frozen assets and nonperforming loans. They do not know exactly how to handle the problem or how to explain it to their shareholders. It is difficult for them to face reality and to revise long-held beliefs such as "sovereign lendings are risk free" and "debts with short maturities are less risky than those with longer maturities." Banks are also getting mixed and confusing signals from governments and monetary authorities. Those public officials do not know whether to stick to the past rules or to impose new and still more rigid regulations on international lending, or simply to accommodate informally a situation that affects the stability of the world financial system.

Without clear guidelines, the banks are following a policy of "buying time," trying to use a variety of accounting gimmicks to postpone recognition of the fundamental differential that was created between the book and market values of their credits. The counterpart of the inefficient governmental "tied-aid" of the 1960s is the "tied-loan" of the 1980s. The practice of specifying that new credit is to be used to repay interest is gradually changing the meaning of a "new money

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facility," transforming it into something like an "interest set-off." These accounting maneuvers have suddenly transformed the LDCs from net importers of capital into net exporters. They have had a tremendous short-term recessionary impact without providing any clear indication of when the LDCs will be able to achieve steady growth.

The financial markets of course are reflecting the uncertainties surrounding the present debt negotiations. Shareholders of major international banks are already anticipating a decline in profitability and capital losses because their banks' outstanding loans to critical LDCs are unfavorably large relative to the banks' capital. Furthermore, a secondary market is beginning to develop for the LDCs' debts. The discounts at which these debts are being traded are a first approximation to the differential between market and book values.

Domestically this crisis has generated a new dimension of risk with which normal entrepreneurial behavior cannot cope. As a result, capital outflows are undermining the LDCs' efforts to acquire a minimum level of foreign resources and are curtailing private investment beyond what would be necessary even within an adjustment program.

The Inefficiency of Piecemeal Adjustment

The uncertainty surrounding the roles of the major central banks and governments of the industrialized countries has been largely responsible for the disorderly way in which the debt crisis has evolved. The basic contradiction has been that these official bodies have tried to adopt a noninterventionist posture, when in fact market forces were leading to a complete halt in loans to developing countries. The first reaction to the acute illiquidity problems of some countries with large external debts was clearly procyclical and did much to magnify those difficulties. The best example was the frustrating 1982 IMF meeting in Toronto. In the middle of the thunderstorm, the developed countries concluded that there was no need for any special action, either to reinforce the capital basis of the multilateral institutions or to establish a liquidity window that could help Third World countries not yet directly involved in the exchange crisis. In an irrational attempt to correct in a few months the overlending of many years, commercial banks applied to whole regions the concept of risk which usually were applied to individual countries. The central banks of course knew that the attempt of each individual bank to reduce quickly its own exposure would ultimately be frustrated by the destabilizing effects of these attempts on the market as a whole. This process can only be terminated by the unilateral action of the debtors—which means market disruption—or by the central banks' use of compulsion, which could be seen as a method of internalizing these "financial externalities."

The Brazilian case dramatically shows the devastating consequences of these forces. In the first six months of 1982, Brazil was able to borrow normally in the market at an average of $1.5 billion a month. Just after the Mexican default Brazil's access to the market was cut by half, and automatic borrowing virtually disappeared in the last quarter of the year. There is no logical reason why lenders' risk perception of Brazil should have changed so radically from one month to another. The Brazilian experience also illustrates that the implementation of further adjustment policies by the developing countries followed by an agreement with the IMF was not enough to stop this leakage.

In October, Brazil announced measures designed to cut its current account deficit by half, and by the end of 1983 an agreement had been reached with the IMF. The negative market forces, however, proved to be more powerful and Brazil lost about $4 billion of interbank deposits and about $2 billion of trade-related lines of credit. These losses added to its liquidity squeeze. It is clear from these facts that once there are no viable credit markets, we cannot continue to adhere to the noninterventionist dogma. Whether we like it or not, there must be some compulsory action to stop the drain of resources, because the speed and intensity of this drain cannot be affected by any conceivable internal adjustment by the debtor countries.

Some developed countries, central banks, and private banks apparently believe that with the surveillance of the IMF and some favorable external factors, the adjustment policies under way among the LDCs will be enough to resolve the debt crisis. They therefore argue that there is no real need for any orchestrated action or major institutional reform. Rather, what is needed are tighter *external* constraints to speed up the adjustment process. A case-by-case or piecemeal approach is thus justified, not only as a strategy to deal with the short-run situation but also as a long-term approach to the debt problem. This reasoning, which is behind the IMF diet now being forced upon many LDCs, helps us to understand not only the ingredients selected but also the speed at which the IMF plans to reduce the inflationary fat and control the excess current account weight.

Avoiding for now the question of how the adjustment costs are to be distributed among LDCs, developed countries, and the banks, we can focus on whether the approach to resolving the LDCs' debt problems is efficient. Will the present efforts of the LDCs' to drastically reduce their current account deficits lead, in a few years, to a sustainable balance of payments? There are good reasons to doubt it. The fundamental one is related to the distinction between stocks and flows. Successful adjustment policies will substantially reduce *marginal* needs, but they can do nothing to reduce the *fixed* needs that reflect a long heritage of accumulation of debts. At the same time, in the absence of market forces, there is no reason to expect that the adjustment policies will reduce the demand for external resources as rapidly as private banks reduce their supply of funds. This last trend is the inevitable result of a lower rate of capitalization, reflecting the expected fall in profitability.

The real solution will depend on the development of new sources of funds with a long-term profile that is consistent with the nature of the investment projects to be financed. These new sources will gradually take up a greater share of the overall financial needs of the LDCs, so we should expect a more balanced participation between private and official sources. These new institutional sources need to be developed immediately, preferably through the expansion of existing multilateral organizations. There may be some tendency to substitute risk capital for financial capital, but we should not expect too much in this area until there are signs of real progress in the economies of these countries. Risk capital and financial capital are usually positively correlated, moving up and down together. In the Brazilian case, the sharp decline in the flow of foreign investment came at exactly the time when private bank loans were drying up. Foreign investment in Brazil fell from the historical level of $1.5 billion a year to $400 million. Unfortunately, in recent years capital has been largely redirected from Brazil toward the U.S. markets.

There are additional issues that must be raised. First, it is important to know whether trade surpluses are generated by a growth of exports or by an artificial compression of imports. These alternative ways of dealing with external disequilibria will determine, to a large extent, whether the improvement in the balance of payments is transitory or permanent; that is, whether the adjustment process will require a long or short recession . Only an improvement in the balance of payments resulting from a growth of exports and from import substitution, based on an effective realignment of relative prices (such as the one going on in the area of energy), can lead to long-run adjustment and a growing economy. But even if—as in the case of Brazil—the economic structure of the country allows (theoretically) for an export-oriented adjustment, another condition must be satisfied if it is to service its debt: The rate of growth of exports must be greater than the external rate of interest. High and unstable interest rates of course make the whole process still more difficult.

Another fundamental issue must be raised. Is it viable for a whole set of LDCs simultaneously to try to generate a long series of trade surpluses, without inducing a significant change in the pattern of protectionism among developed countries? Brazil is an interesting example of the conflicting consequences of these policies. In the past roughly half of our manufacturing exports have been sold to Latin America and African countries, but these countries are now being forced to cut their imports sharply. It is very hard to imagine how Brazil will develop new markets for these products over the medium run.

Finally, we should consider the detrimental long-term impact of this trade retrogression on economic efficiency and thus on the prospects for growth in the LDCs. The full impact of this effect will be correctly assessed only in the near future.

Under the present circumstances, the current strategy of relying only on LDCs' internal policies seems inadequate to prevent a dark future of adjustment with permanent recession. But in moving from the internal logic of the current strategy to the expected behavior of external factors, we will be replacing reason with hope and prayers. Thus it is not uncommon to hear that governors and bankers alike are counting on God's good will, so that oil prices remain stable, interest rates fall, commodity prices increase, industrialized countries grow, and the LDCs find a way to ensure political stability in the midst of increasing poverty and social unrest. Futhermore, this set of favorable factors must come together not only next year but for many years to come. I think that we all agree that this would require a very special action by God which, by recent evidence, should not be anticipated, especially when it should reflect the prayer of a banker. It is, therefore, unwise to link one country's future to such extreme dependence on factors that it does not control, factors whose behavior has been extremely regressive from the debtor's viewpoint, as in the case of U.S. interest rates.

Who Should Bear the Adjustment Costs?

We can now consider the question of equity: Are the adjustment costs being distributed fairly among the LDCs, the developed countries, and the banks? I think we must agree that the LDCs are bearing a disproportionate cost in the adjustment process. All of them, without exception, are experiencing recessions whose severity is unprecedented. In 1983, Brazil and Mexico both had a negative real rate of growth of around −5 percent, which sharply contrasts with the positive real rate of growth in the United States. For Brazil, this will be the third year in a row of sharp declines in real per-capita income, which is now back roughly to its 1975 level. In 1984, we will probably see a repetition of this asymmetrical and regressive situation where growth in the industrialized economies takes place side by side with a generalized recession among the LDCs. The well-known multiplier effects, through which trade opportunities in the LDCs are enlarged by growth in the developed countries, will largely be offset by the LDCs' heavy debt-service requirements. Increasing unemployment, especially in urban areas, is changing social expectations and dangerously feeding social tensions. For many decades, social mobility associated with strong economic growth has been an important element in minimizing the potentially destabilizing consequences of large income inequalities in Brazil. This has now ended, and it is difficult to know what can happen with a prolonged combination of income inequality and social immobility.

Until recently, the majority of the LDCs have demonstrated enormous and in many cases surprising flexibility in absorbing the extremely high social costs involved in the adjustment process. In the Brazilian case, a successful political transition has, up to now, minimized social unrest. We should not dismiss, however, the dangers of the present situation, especially when society begins to realize that the adjustment process will take longer and will still require more sacrifices. These frustrations tend to increase as we discover that, despite all this social and economic cost, there are no real signs of improvement in the country's liquidity. On the contrary, most countries remain extremely vulnerable to any small deviation in some critical element such as external interest rates.

Toward a Coordinated Adjustment Strategy

Unless we sharply change the current strategy of dealing with the debt problem, we may very soon see a political overreaction by the LDCs, an inevitable refusal to accept a pattern of adjustment which is clearly regressive and offers no clear solution to the present crisis. What we need is a symmetrical adjustment process, whereby the financial system and possibly the industrialized countries as a group bear some of the costs of adjustment along with developing nations. An orchestrated action is essential if we are to find a lasting solution to the debt crisis, one which would minimize the uncertainties of the present step-by-step approach and establish the basis for the resumption of growth in the LDCs.

The Role of the Banks

First, the banks need to recognize their role and coresponsibility in the indebtedness process. Overborrowing and overlending are different sides of the same coin. Some losses will have to be internalized. Depending upon the write-off criteria, this may be done gradually to avoid any serious destabilizing impact upon the financial system as a whole. As a matter of fact, some banks are already anticipating this by voluntarily increasing provisions for future losses.

Adjusting the pricing of the rescheduled debt to more realistic levels would improve the chance of reducing future capital losses, which could arise from unilateral action by the LDCs. There is no logical reason for insisting that market terms be applied to a nonmarket situation. An interesting idea is to use a long-term expected rate and a fixed real rate of interest in the renegotiations, instead of the usual current short-term rates. This would keep a market reference but would be more consistent with the LDCs' capacity to service the debt. It would also minimize the impact of interest rate fluctuations, which have been an important disturbing element behind the scenes. This long-term rate is the level to which current rates would move if all our expectations about future U.S. deficits and monetary management were realized.

In a nonmarket situation, of course, it is very hard to establish a correlation between spreads and risks. Furthermore, because of IMF collateral, margins after rescheduling necessarily should be lower than before. Slowly there has been a recognition that renegotiated spreads should reflect transaction costs rather than an arbitrary evaluation of risks. Such an evaluation cannot be taken seriously after a default or a de facto transformation of short-term into long-term money.

Besides reducing interest rates and spreads, some sort of capitalization of interest payments may still be necessary to make the present debt negotiations feasible. Brazil is again a classic example. This year Brazil will have to pay about $10.5 billion of interest under the assumption that LIBOR (London Interbank Offered Rate) remains at 10.5 percent. Medium- and long-term interest payments to foreign banks are estimated at $6.5 billion, which is roughly equal to the amount of new money recently committed by the banks. If LIBOR increases an average of just 1 percentage point, the additional resources needed to keep the same current account target will be about $700 million. Unless we address fundamental questions objectively, we will unnecessarily delay the correction of the LDCs' external disequilibrium and increase the social and economic costs of the adjustment process.

The increasing costs of trying to put together sizable amounts of money under the new label of "negotiated lending" should be recognized, especially since a significant fraction of the resources will be used to pay back the bank themselves. Capitalization of interest, similar to what has been already done with amortization, would make the whole process simpler. In most cases it would eliminate the need to seek sizable amounts through nonmarket channels. This capitalization of interest will require that legal constraints be adapted to reality, but the resistance of the banks—particularly the money-center banks—will also have to be overcome by a clear answer to the fundamental question of who will be controlling the process. Under the present circumstances the banks have the initiative. They fear that by extending the refinancing concept to include both amortization and interest payments, the whole rescheduling process may become more or less automatic and the LDCs might lose the impetus to continue to correct their external imbalances. This, of course, is not necessarily true: For many countries, the refinancing of amortization and interest on medium- and long-term loans would still require a tremendous effort to improve their trade balances. This is certainly the case of Brazil. Interesting enough, because of the difficulties of the present stepwise approach and particularly its impact on market expectations, many banks, especially the Europeans, are openly discussing the capitalization alternative.

The Necessity of Official Support

We may find out, however, that at any given moment the losses implicit in the differential between current and expected real rates are too high to be entirely absorbed by the banks. There will then be no alternative but to look for some official support, either at an individual country level or via a multilateral institution. In the end an "interest facility" may be necessary to ensure the implementation of the new debt-adjustment program. The costs of such a program would clearly be offset by the benefits of reducing the uncertainties which are severely affecting the working of the financial markets. The program would open the way to a real possibility of a new path of "adjustment with growth."

Official participation may be justified by extending the coresponsibility principle to the industrialized nations' governments. In general, governments of creditor nations have taken an openly favorable position toward the new recycling role of the banks. Private recycling has replaced the bilateral action of the past and, in many cases, governments have competed among themselves for newly created world money centers. All of them believed in the efficiency and automatism of the world money market. None could anticipate a market failure, but now that it has occurred someone will have to pay the cost. The United States has a special responsibility because of the direct relationship between its fiscal and monetary policies and external rates of interest, whose unprecedented high levels during the last five years have added to the LDCs' indebtedness problems.

An Expanded Paris Club

Our analysis has shown that the strong interdependence among LDCs, developed countries, and the banks requires a formal institutional framework, one in which negotiations over the rescheduling of billions of dollars of debt can be coordinated. A simple idea is to have an expanded Paris Club that would deal not only with government debts but also with *private* debts, which represent the major fraction of the LDCs' external debt. Under this umbrella we could assemble officials from the IMF, private banks, central banks, LDCs, and the industrialized nations to search for a new regulatory framework in which the real issues behind the LDCs' debt problem could be addressed. This new framework is essential for increasing the relative bargaining power of the LDCs at the negotiation table. Their bargaining position has been fundamentally affected by the fact that, as a direct corollary of the illiquidity crisis, the LDCs have no international reserves. This new forum would also help to establish a common and more unified action among governments, regulatory agencies, and monetary authorities whose conflicting views have been one of the more disturbing aspects of the present world debt crisis.

The IMF's Dilemma

The IMF is clearly suffering from the contradiction between its present role and the new role that needs to be performed. The existing debt problems have required the IMF to adopt an interventionist posture—contrary to its market dogmas—to ensure that fulfillment of the minimal financial needs consistent with the balance-of-payments targets implicit in the adjustment programs it has cosponsored. The IMF's role has been innovative and important, and has helped to provide the leadership that has been seriously lacking from the governments of major industrialized nations. Nevertheless, it needs to go beyond the quantitative aspects of the financial packages and look into the fundamental pricing issues discussed above. No one is in a better position than the IMF to understand the vulnerability of a country's cash-flow projections to variations in interest rates. Since "half intervention" is like "half pregnancy," there are no logical reasons why the IMF could not begin to increase its pressure on the banks about this issue.

The Fund has found it difficult to design adjustment programs that are internally consistent, yet take account of the existing social and political constraints. In Latin America, for example, all the adjustment programs except for the Mexican ones had to be revised after only a few months. Overambitious goals, reflected in too short a period of adjustment, have created a credibility gap which makes the implementation of the policies still more difficult.

The need for the LDCs to adjust to the new set of external constraints and to correct their internal imbalances is well understood. But it is equally important to recognize that the structural nature of the problem requires a *sustainable* adjustment process. When we talk about sustainability we must explicitly consider not only economic factors but also social and political restrictions. Therefore time is a key element for a succcessful readaptation of the LDCs. It took Brazil nearly 10 years to achieve a structural transformation in response to the oil crisis. How long will it take to implement fundamental changes that will allow a resumption of growth with a much lower access to external finance? This is a very difficult question. The compounding effects of the oil and interest crises indicate that adjustment will not be completed within the fixed three-year period which characterizes the Extended Fund Facility (EFF). The IMF needs to accept this reality and plan for longer and more flexible programs.

Learning from Brazil

The Brazilian experience dramatically illustrates all the different dimensions, economic and social, of the present debt crisis. Here we have a country with tremendous natural resources, large investment opportunities, and a vast managerial capacity whose dynamism has been its trademark in the past, paralyzed by a financial crisis whose causes and consequences are beyond its own sphere of influence. No country in the world will accept a condemnation to stagnation especially when it is a country as Brazil in which growth is critical to social mobility.

It is clear from the foregoing analysis that under the present rules of renegotiation, a successful adjustment process—characterized by the control of inflation and a steady reduction in the current account deficit—will not lead to a new growth path for the LDCs. What is needed is a simultaneous adjustment of the financial system itself. This process will not happen spontaneously but, on the contrary, will require the concerted action of governments and multilateral institutions. These orchestrated changes are essential for the preservation of the infant market economies that have recently emerged in many of the developing countries. A further delay in setting up a new strategy to deal with the LDCs' debt situation and their external financial needs will certainly lead to political radicalization and a renewed trend toward economic isolation.

The debt crisis has dramatically illustrated how financial flows have integrated the world. What happens in Rio de Janeiro, Buenos Aires, or Mexico City has a profound impact on the major financial centers of the world. Let us learn this important lesson and work together to find common solutions that are geared toward the economic and social welfare of the world as a whole.

ECONOMIC POLICY FOR A STABLE WORLD ORDER

Jan Tumlir

Introduction

It happens often that you prepare a paper or a talk for a conference and before you get to deliver it, all your main topics and even particular ideas have already been discussed. Normally it is not so much infuriating perhaps as saddening, an incontrovertible proof of your own lack of originality. Today, however, I derive only satisfaction from it. Planning this talk, I decided to elaborate several ideas I retained from a brief discussion with Bob Weintraub at the last conference he attended, in Geneva, last summer. So it is pleasing to see to what extent this has become truly his conference, with his last intellectual concerns on the minds of us all.

The conversation I referred to had been about the responsibility of a few large countries for an international economic order in which numerous small countries must try to succeed. He and I talked about how badly the large countries were discharging this responsibility. Today we are seeking a solution to the debt problem in an international system that is about to give out at the seams because the large countries have not been good guardians of it. The debt problem is only one symptom of this failure, but it may be the culmination of an acute systemic crisis.

From an institutional perspective, an international economic order consists of little more than two sets of arrangements—or better, com-

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The present paper is a refined version of the author's banquet address in memory of Robert E. Weintraub, which was given at the Cato Institute's conference on "World Debt and the Monetary Order," 20 January 1984, in Washington, D.C.

mitments exchanged among governments—concerning the national conduct of monetary and trade policies. These two national economic policies have direct and obvious repercussions abroad. They are also the two policies that governments will find it most difficult to pursue in the interest of their societies at large; since governments will be continuously pressed and tempted to act on behalf of organized special interest groups. The monetary commitments and rules focus on maintaining currency convertibility, while trade policy rules typically aim at ensuring stability of trading conditions. Their main task is to limit protection to tariffs which can be bound against unilateral (unnegotiated) increases. The two sets of policy rules must be carefully dovetailed, because over a broad range of situations restrictions on payments and on trade are close substitutes.

When rules of this kind are in force and observed in at least several of the large economies—so that currency convertibility coexists with price level stability in these economies, and exporters in all countries have equal and stable access to at least these few large national markets—an efficient world market (an international price system) can be said to exist. The relative prices formed in this market will promptly transmit information about incipient scarcities and surpluses anywhere in the world economy. This information is indispensable for timely adjustments in the structure of national economies. The world price system thus allows major economic changes to be anticipated in all societies. The future does not have to arrive in the form of surprises and upheavals.

It is the erosion of this world market order, in its most fundamental functions, that I want to emphasize. The difficulties experienced on the monetary side of it—inflation and highly variable interest and exchange rates—are the main topic of this conference. Clearly, the origin of the debt problem lies in this conference. Clearly, the origin of the debt problem lies in this nexus of inflation, interest and exchange rates. The story can be told in different ways depending on the predilections of the teller. I personally side with those who emphasize the recent history of the dollar exchange rate. But the picture is incomplete without bringing trade into it, the "real" side, as economists call it, of the world economy.

It is not a reproach to my colleagues specializing in monetary analysis to note that the theorizing about inflation, interest and exchange rates proceeds, and cannot but proceed, on the assumption of a reasonably competitive world economy, in which disturbance and uncertainty arise mainly from monetary policy. If such a competitive system did exist, I am convinced that real exchange rates would be, not perhaps perfectly stable, but certainly much more so than they have been in the last decade. To explain their observed instability, we have to take into account the systemic impairments on the real side of the economy—the great *recent* deviation of reality from our competitive model.

What Remains of the Price System?

It is trade that connects the national price systems into an international one. The most important information processed by the national price systems is about developments abroad. When, therefore, I talk about protection and the growing inhibition of trade, I am only secondarily concerned with the direct contribution of trade to GNP (for example, the employment effect of exports, specialization, productivity, etc.). Primarily I have in mind the essential role of trade in creating and maintaining an international price system. For that reason, too, I find it difficult to work up much interest in tariffs, which both history and theory show to be quite innocuous protective devices, at least when stabilized. Once in place, they do not interfere with changes in relative prices. My main concern is with quantitative restrictions, which have the effect of paralyzing the price system in their area of application.

Most of you are aware of, and I dare say worried about, the recent growth of protectionism. But I dare say, too, that most of you still consider protection to be more of an exception than the rule. To be sure, it is very difficult to come up with any reliable quantitative indications in this area.[1] Nonetheless, there exist several independent estimates of the proportion of world trade that encounters obstacles of a more severe kind than just tariffs. François David (1983, p. 225), a senior official of the French Ministry of Trade, estimates that between 55 and 60 percent of world trade is subject to nontariff restrictions. Sheila A. B. Page (1981, p. 29), of the National Institute for Economic and Social Research in London, has come up with a figure of 48 percent. My own research indicates between 40 and 45 percent of total trade, and between a fifth and a quarter of world trade in manufactured products, to be similarly restrained in 1982.

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[1] The main obstacle is posed by the unavoidable task of averaging. There is a large number of protective devices in use, secret bilateral agreements being increasingly preferred. But even if we had information on all the restrictive devices in use, for a meaningful average we would also have to know their *degree of restrictiveness*. Thus in averaging, each item in the array of devices would have to be weighted by the amount of imports *it keeps out*, an unobtainable measure. Furthermore, indicating the extent of protection by the proportion of world trade under restrictions more severe than tariffs is a misleading measure because when world trade grows and the restrictions measured are indeed restrictive, the proportion of trade under them will be declining from year to year.

Trying to estimate the extent of protection leads to endless disputes, methodological as well as political. We can avoid them by pointing out that, in the present context, we are interested not in protection as such, but in the degree to which it impairs the price system; that is, the degree to which it reduces the amount and value of the information the international price system is allowed to transmit. In this respect, it can be shown that the above estimates substantially *underestimate* the damage. First, all of the above estimates of protection disregard subsidies. Subsidization, however, has become in the last decade another major cause of distortion in international prices. Second, it is seldom that all trade in a particular product will be controlled by quantitative restrictions. But even if only the trade flows from the lowest-cost sources are so controlled, the rest of international trade in that product, which is not included in the estimates (and which may be by far the larger part of international exchanges in that product category), will be transacted at distorted prices.

If the magnitude of the estimates of nontariff restrictions seems fantastic to you—and I would not be surprised by that reaction—try a mental experiment. Try to enumerate all the industries in which pricing is determined or at least strongly influenced by deliberate policy rather than by the market. The list would begin with crude oil, the price of which is the main determinant of all energy prices; it would include almost all of the temperate zone's agricultural products, and those products of tropical agriculture that are subject to commodity agreements; it would also include textiles and clothing, an industry which is fiercely competitive in every nation but in which prices in the industrial countries are effectively shielded from the competition of low-cost producers in developing countries; iron and steel, an industry which is highly concentrated on national levels and, for the time being, also effectively cartelized internationally. In automobiles, Western industries are securely protected by quantitative restrictions against the world's most efficient producer, Japan. Large segments of the petrochemical industry are cartelized, and quantitative restrictions also proliferate in such minor areas as TV sets and tubes, ball bearings, batteries, and computer hardware. In addition, acrimonious negotiations and outright power plays continue as to where the most promising new products are to be manufactured. One is thus justified in asking: What remains of the price system?

When the price system is paralyzed or distorted to this extent, when so many prices are prevented from finding their own proper levels but the exchange rates are free, is it surprising that the latter move erratically? With the price system so extensively impaired, there simply is not enough information to make possible a smooth adjustment of exchange rates to purchasing power parities.

Indeed the difficulty for the economist may now lie in explaining why the world economy still functions at all, however dissatisfied we may be with its functioning. The answer is, of course, that there is a lot of ruin in any economy with a modicum of freedom. I am sometimes unsure whether it is actually an advantage of the capitalist system that it can take such an enormous amount of beating. If it were in the habit of collapsing more frequently, we would perhaps govern ourselves more prudently (and more cheaply to boot). But that is neither here nor there. We want to see how the guardians of the system, the governments of the large countries, react to its deepening crisis.

Pitfalls of the Negotiations Approach to Trade Liberalization

Important statesmen are issuing calls for a "new Bretton Woods" conference and for a new round of multilateral trade negotiations, which suggests that they are aware of the existence of a crisis. Do they really imagine that it can be resolved by a negotiated agreement, some 90 to 120 governments achieving unanimity in some vast conference room in New York or Geneva on what has been wrong with the world? Perceptions of national interest now differ so much that the conclusion most likely to be agreed upon would be, in the words of Henry Simons, that "nothing should be done about anything until everything has been done about everything else" (1948, p. 325).

A very small number of large countries accounts for the bulk of international trade and a smaller number still for the bulk of international lending. True, there are benefits from expanding the number of countries willing to abide by agreed policy rules, but these benefits decline at the margin and beyond perhaps 10 or 15 countries they begin to fall off sharply. You get to the very small countries rather quickly. At the same time, the costs of expanding membership rise no less steeply. These costs are counted in terms of the growing difficulty of agreement and the growing vacuousness of the rules, as they are eroded by diplomacy. Universal membership systems invariably tend either toward the lowest common denominator in matters of principles and rules or to an untenable arrangement between groups of countries with different rights and obligations, some having more rights than obligations and conversely for others. In particular, the tendency will be strong to build into universal membership systems mechanisms for international redistribution of income and wealth, and this is certain to interfere with the regular exercise of rights and the performance of duties required by a stable international order.

It is therefore difficult to consider these calls for reforming the world by a common effort to be an exercise of international responsibility. I am rather inclined to consider them a flight from responsibility. "Let us call a world reform conference and if it fails, as it most likely will, we shall have demonstrated not only our concern and our will to reform, but also that a real reform is impossible." Take the debt crisis as an example. The creditor countries are hiding behind the International Monetary Fund and are urging the Fund to use its leverage to press the debtor countries to liberalize their imports, or at least to restrain them from imposing further import restrictions. This is not a bad idea in itself, but I fear that the Fund will not be able to support the overload of hopes placed upon it. For what is expected from it is, in short, that it will make good debtors out of bad ones singlehandedly—without the creditors having to change their own policies one bit. (Except, perhaps, for creating more money through enlarged IMF quotas, as if they did not have enough of an inflation problem.)

There is no doubt in my mind that the debtor countries should, for their own good, liberalize their import policy along with other domestic policies. What astonishes me is the political naiveté, and the shortsighted selfishness, of putting this advice in the form of a demand or a condition. To state my thoughts on the issue more precisely, a resolution of the debt problem which is satisfactory to both sides—or at least minimizes the risk of some form of an open crisis—requires some combination of two general policy approaches on the part of the debtor countries: macroeconomic tightening and microeconomic liberalization.

Policy Requirements

Macroeconomic tightening is required because a credit crisis is, as the word *credit* itself suggests, a crisis of confidence. When the ability to service the debt has been demonstrated, confidence returns and credit becomes available again. How long the demonstration takes—that is, how long the debtor countries have to show a current account surplus or at least go without a deficit—nobody can say at the moment. But we can say with some confidence that the domestic effects of the macroeconomic tightening necessary for the demonstration will depend on the extent of the simultaneous microeconomic liberalization. In particular, the level of unemployment prevailing during the austerity period will be inversely related to the extent of liberalization.

Politically speaking, spontaneous liberalization on the part of the debtor countries is nowhere in sight. This is an unpropitious time to preach unilateral *aperatura* policies to Latin America. They were tried and, despite considerable initial success, ended badly—sunk, so to speak, in the exchange rate waves made by the large countries. But it is too late for sermons for other reasons as well.

When international trade discipline collapses, and almost any industry in any country can obtain additional protection practically for the asking, producing for export becomes singularly unattractive. An instance of getting protection for the asking was the widely publicized cave-in of the Reagan administration before the textile lobby last November.[2] The industry obtained more than it had even dared to hope for, and is now on its way to realizing its old dream, a guaranteed share of the national market. This is just the most recent example—an all too typical Washington confrontation, with all the drama of a resistible force meeting a movable object.

Under these conditions, uncertainty itself becomes a highly effective trade restraint, even in markets which are technically still open. It obviously takes a much greater degree of macroeconomic pressure to push exports in such a situation than under conditions of guaranteed market access. Let us not forget, either, that the private sector is now the minority sector in all the most indebted economies (which goes a long way toward explaining their debt problem), and that the public sector is notorious for its capacity to evade macroeconomic cutbacks. The private sector thus has to bear the brunt of the monetary and financial tightening and, notwithstanding what I have said about its capacity to take a beating, there are limits to everything.

Finally, consider the purely political effects of the contrast between the policies demanded of the debtor and those in force in the creditor countries. Preaching free trade to unresponsive listeners, I am reduced to envy thinking of the vast and impassioned audiences which the marxist preachers of all kinds of financial conspiracy theories are enjoying in the debtor countries—whose governments are being urged to liberalize while their creditors are increasing protection! Politically this means that the creditor governments are not alone in thinking along mercantilist lines. The debtors think that way too, only more so.

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[2] See Pine (1983a, 1983b, 1983c, and 1984) for a discussion of current changes in U.S. textile policy.

If there is to be a liberalization of import as well as domestic economic policies, to provide the dynamic impulses capable of offsetting the employment effects of the unavoidable austerity, the creditor must meet the debtor countries half way. This would do more than merely help the latter to service their debt because, apart from the outstanding IOUs, the economic-political problem is much the same on both sides. The creditor countries, too, face the necessity of fiscal and monetary restraint—and they, too, are looking for ways to offset the temporary effects of the tightening. Basically they know already that the only way to stabilize their own economies is to allow the market to play a larger role, to restore the international price system, and to shrink the public sector relative to the private sector. Their only problem is how to do it, how to get there.

The governments of all Western democracies know that the conception of economic policy, of the government's role in the economy, that guided them through the 1960s and a good part of the 1970s is dead. Under that conception, unemployment was considered worse than inflation; the government viewed itself as the vanguard of progress, leading the private society into the future; and consumers, businessmen, and financial agents were regarded as a pack of Pavlov's dogs duly salivating and otherwise appropriately reacting to the signals of the scientific policy maker at the center.

Economics as a professional discipline has been recovering from this intellectual blight for some two decades. It is now becoming generally accepted in the profession that the only policies whose consequences an economist can hope to predict are policies generated by relatively permanent and widely understood rules. On what may result from policy improvisation which changes from quarter to quarter, the economist can speak with no more authority than the average chatty drinker in your neighborhood bar.

For governments, abandoning long-held fallacies is difficult even when they have been perceived as such. Governments embody social authority and whatever they do is a precedent, binding or at least influencing their future actions. Involved as they have become in the impossible responsiblity of guiding large, complex and still largely free economies into the future, they can only zigzag. Can one be surprised if, forced to zigzag, they also try to cut corners? As international economic policy conflicts multiply, their settlements are improvised under pressure and often in ways that raise legal doubts. It is no exaggeration to say that the increasingly conflictual nature of international economic relations has begun to erode the integrity of national legal systems.

It is on the background of these developments that the need for a serious trade liberalization may be fully understood. A speedy agreement on trade liberalization can only be achieved among a limited number of countries. Why not among the major creditor and debtor countries, who have the most at stake here? The results of their agreement could then be generalized to all other countries by the unconditional most-favored-nation clause, and additional countries could join the negotiation later. A reduction of obstacles to trade and a more rapid expansion of international exchanges, of course, would contribute to financial stabilization. Yet even at this stage these financial effects must be considered only secondary benefits. On the face of it, trade restrictions protect particular industries and interest groups. In the last respect, however, they protect a particular conception of economic policy, of the government's role in the economy, and a particular form of politics, all of which are at variance with constitutional prescriptions.

The Threat to Democratic Constitutions

We can no longer overlook the threat to democratic constitutions from an excess of government's "responsibility" for the economy of its people. Democracy is, after all, only a political method of accommodating change without a revolution. It must therefore rely mainly on procedural rules and have only a minimum of substantive and discretionary content. When the state comes to be so involved in the processes of society that it becomes the necessary support of the existing economic and social structures, it has become identified with the *status quo*. Then, of course, the basic function of democracy—change without upheaval—has become undischargeable.

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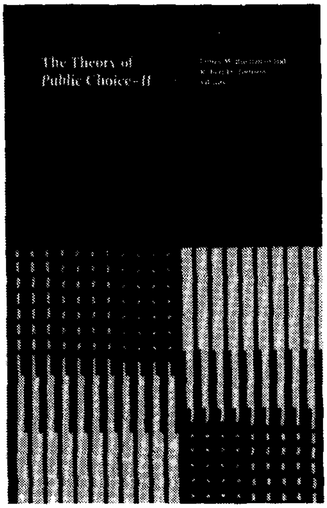

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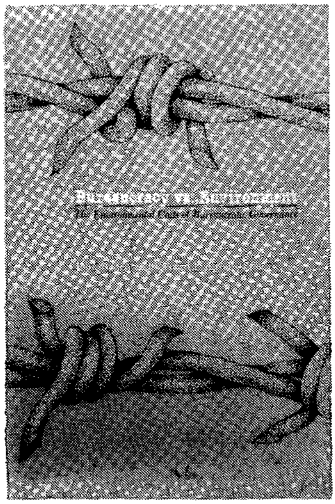

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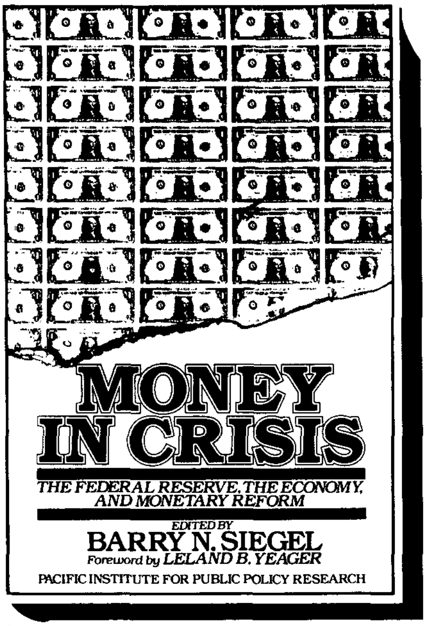
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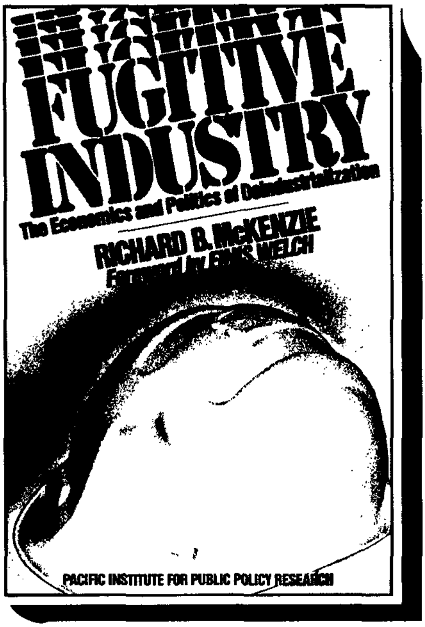
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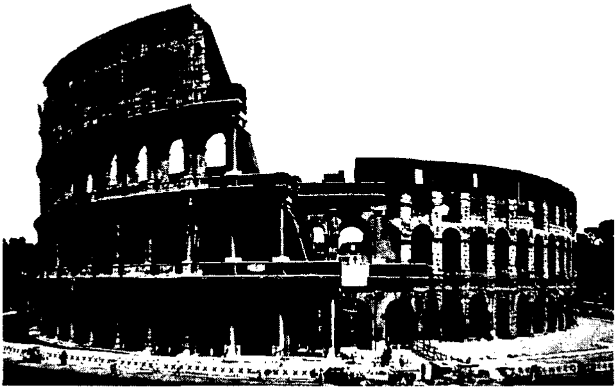

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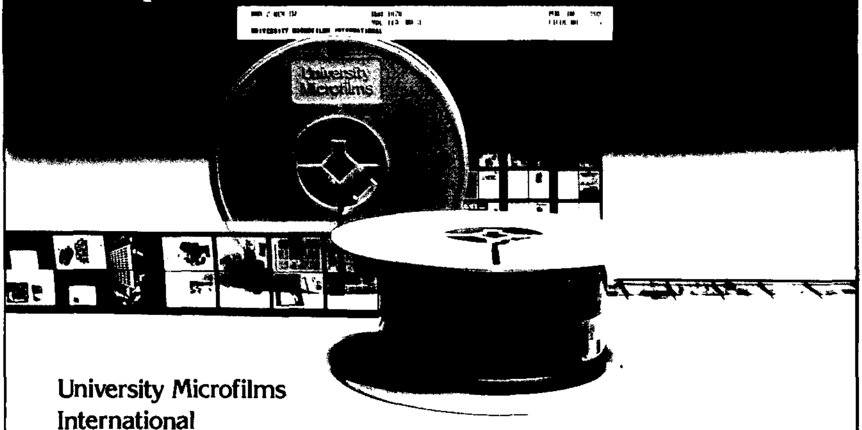

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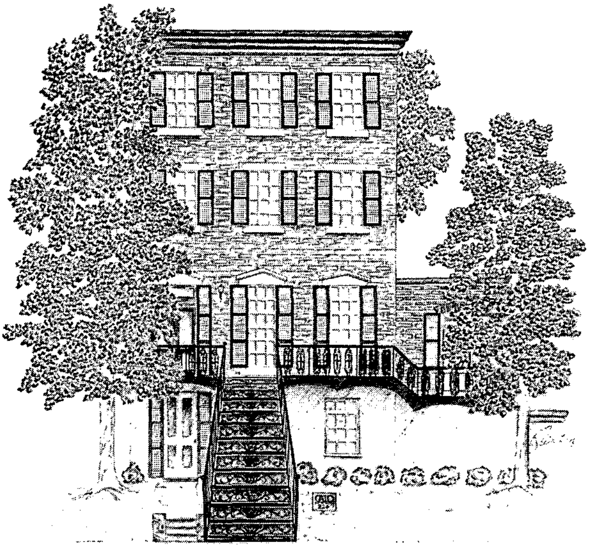

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"Principles or Expediency,"
in *Toward Liberty*, vol. 1 (Menlo
Park, Calif.: Institute for Humane
Studies, 1971), p. 39.